

U. S. NAVAL AMMUNITION DEPOT  
CRANE, INDIANA 47522

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From: Commanding Officer, U. S. Naval Ammunition Depot, Crane, Indiana  
To: National Aeronautics and Space Administration, Goddard Space Flight  
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tration Space Cell Test Program; submission of

Encl: (1) Monthly Progress Report as of 28 February 1965 (3 copies)

1. The progress report for National Aeronautics and Space Administration  
purchase order W11,252B on the space cell test program is submitted as  
enclosure (1).

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N65-19929

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By direction

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# MONTHLY PROGRESS REPORT THROUGH 28 FEBRUARY 1965

## LIFE CYCLE TESTS

1. Status of Cycling Program: The cycling program has included cells from the following manufacturers: General Electric Company (G.E.), Gould-National Batteries, Inc. (Gould), Sonotone Corporation (Sonotone), Yardney Electric Corporation (Yardney), Gulton Industries, Inc. (Gulton) and Delco-Remy (Delco).

TOTAL NUMBER OF PACKS PLACED IN PROGRAM: 108.

| Cell Type                      | Total Number of Packs |               |        | Cells Failed*     |               |
|--------------------------------|-----------------------|---------------|--------|-------------------|---------------|
|                                | Cycled To Date        | Still Cycling | Failed | Since Last Report | Total To Date |
| NICKEL CADMIUM (10-cell packs) |                       |               |        |                   |               |
| G.E. 3.0 ah                    | 12                    | 9             | 3      | 0                 | 23            |
| Gould 3.5 ah                   | 12                    | 5             | 7      | 1                 | 51            |
| Sonotone 5.0 ah                | 12                    | 11            | 1      | 2                 | 21            |
| Gulton 6.0 ah                  | 12                    | 6             | 6      | 0                 | 57            |
| TOTAL                          | 48                    | 31            | 17     | 3                 | 152           |
| NICKEL CADMIUM (5-cell packs)  |                       |               |        |                   |               |
| G.E. 12 ah                     | 13                    | 11            | 2      | 0                 | 7             |
| Gulton 4.0 ah                  | 6                     | 6             | 0      | 0                 | 0             |
| Gulton 6.0 ah                  | 1                     | 1             | 0      | 0                 | 2             |
| Gulton 6.0 ah HSI              | 3                     | 3             | 0      | 0                 | 0             |
| Gulton 12 ah                   | 6                     | 6             | 0      | 0                 | 0             |
| Gulton 20 ah                   | 12                    | 6             | 6      | 0                 | 23            |
| Gulton 50 ah                   | 2                     | 0             | 2      | 1                 | 6             |
| Gould 20 ah                    | 12                    | 6             | 6      | 1                 | 19            |
| TOTAL                          | 55                    | 39            | 16     | 2                 | 57            |
| SILVER CADMIUM (10-cell packs) |                       |               |        |                   |               |
| Yardney 12 ah                  | 2                     | 0             | 2      | 0                 | 16            |
| TOTAL                          | 2                     | 0             | 2      | 0                 | 16            |
| SILVER ZINC (5-cell packs)     |                       |               |        |                   |               |
| Delco 25 ah                    | 2                     | 1             | 1      | 0                 | 5             |
| Delco 40 ah                    | 1                     | 1             | 0      | 0                 | 2             |
| TOTAL                          | 3                     | 2             | 1      | 0                 | 7             |

\* All failure analysis results are cumulative. These results are shown on pages 4 through 29.

Enclosure (1)

2. Test Parameters:

a. Ambient Temperatures:

- (1) 0° C.
- (2) 25° C.
- (3) 40° C.

b. Voltage limits per pack on charge:

- (1)  $1.55 \pm 0.03$  volts per cell at 0° C.
- (2)  $1.49 \pm 0.03$  volts per cell at 25° C.
- (3)  $1.45 \pm 0.03$  volts per cell at 40° C.
- (4)  $1.97 \pm 0.03$  volts per cell at 25° C. on the silver zinc packs.

c. Depth of Discharge:

- (1) 90-minute and 3-hour orbits:
  - (a) 15 percent and 25 percent at 0° C.
  - (b) 25 percent and 40 percent at 25° C.
  - (c) 15 percent and 25 percent at 40° C.
- (2) 24-hour orbits:
  - (a) 50 percent at 0° C, 25° C and 40° C.
  - (b) 40 percent at 25° C on the silver zinc packs.

d. Orbit Times:

- (1) 90 minutes--30-minute-discharge and 60-minute charge.
- (2) 3 hours--30-minute discharge and 150-minute charge.
- (3) 24 hours--1-hour discharge and 23-hour charge.

3. Data:

a. Normal operation schedules complete data to be recorded on 90-minute and 3-hour packs every 32 cycles. On 24-hour cycles, complete data is taken every eight cycles.

b. The attached data sheets give end of discharge and end of charge voltage readings for each cell on each cycle recorded.

#### 4. Capacity Tests:

a. Prior to cycling, each pack was given a capacity test at its respective cycling temperature. This check consisted of a c/10 charge for 16 hours followed by a c/2 discharge to 1.0 volt/cell average. After each 88 days of cycling, each pack was discharged at the c/2 rate to 1.0 volt/cell average following a charge at the cycle rate. The pack was then recharged at the c/10 rate for 16 hours and discharged at the c/2 rate to 1.0 volt/cell average. The pack was then recharged at the c/10 rate for 48 hours, voltage limited to the cycle limits. Data of capacity tests is tabulated on pages 30 through 33.

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | CHARGE PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: General Electric 3.0 Ampere-Hour   |  |
|----------------|-----------------------|--------------------------|---------------------|----------------|---------------------|---------------------|---|--|
|                |                       |                          |                     |                |                     |                     | FAILURE<br>ANALYSIS   |  |
| 16             | 40%                   | 1.5                      | 25°                 | 427            | 7                   | 3985                | Low Volt Disch, Normal Volt Chg, Pos Tab Broken and Touching Case. Burned Tape on Tab Caused by Overheating From Poor Tab Weld.               |  |
|                |                       |                          |                     | 53             | 6                   | 4473                | Low Volt Disch, Normal Volt Chg, Short on One Edge of Plates, Neg Plate Material Penetrated Separator.  |  |
|                |                       |                          |                     | 361            | 1                   | 4741                | Low Volt Disch, Normal Volt Chg, Shorted, Separator Deteriorated. Neg Plate Material Penetrated Separator.                                    |  |
|                |                       |                          |                     | 522            | 5                   | 4917                | Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.  |  |
|                |                       |                          |                     | 456            | 10                  | 4917                | Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.  |  |
|                |                       |                          |                     | 719            | 4                   | 5013                | Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Several Small Burned Areas on Separator. |  |
| 39             | 15%                   | 1.5                      | 50°                 | 541            | 2                   | 779                 | Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.   |  |
|                |                       |                          | 40°                 | 540            | 6                   | 2083                | Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.   |  |
|                |                       |                          | 40°                 | 549            | 7                   | 2523                | Low Volt Disch, High Volt Chg, Pos Tab Burned.  |  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: General Electric 3.0 Ampere-Hour  |  |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|--|--|
|                |                       |                         |                     |                |                     |                     | FAILURE<br>ANALYSIS  |  |
| 40             | 25%                   | 1.5                     | 40°                 | 464            | 3                   | 2073                | Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.  |  |
|                |                       |                         |                     | 3131           | 8                   | 2182                | Low Volt Disch, Normal Volt Chg, Leaked, Loose Plate Material on Separator.  |  |
|                |                       |                         |                     | 47             | 7                   | 2182                | Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.   |  |
|                |                       |                         |                     | 49             | 5                   | 2446                | Low Volt Disch, High Volt Chg, Pos Weld to Terminal Stud Burned, Poor Weld.  |  |
|                |                       |                         |                     | 45             | 10                  | 2461                | Low Volt Disch, High Volt Chg, Loose Plate Material on Separator, Short at Outside End of Pos Plate.   |  |
|                |                       |                         |                     | 466            | 2                   | 2509                | Low Volt Disch, High Volt Chg, Leaked, Pos Tab Burned and Shorted to Neg Tab.  |  |
|                |                       |                         |                     | 441            | 6                   | 2509                | Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.  |  |
|                |                       |                         |                     | 416            | 4                   | 1182                | Low Volt Disch, Low Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.   |  |
|                |                       |                         |                     | 499            | 3                   | 1515                | Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.   |  |
|                |                       |                         |                     | 412            | 6                   | 1911                | Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.  |  |
| 43             | 15%                   | 3.0                     | 40°                 | 426            | 9                   | 2298                | Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Top of Separator Burned, Separator Impregnated with Neg Plate Material, Separator Deteriorated. |  |

| PAGE NUMBER | DEPTH OF DISCHARGE | CHARGE PERIOD (HOURS) | TEST TEMPERATURE | CELL NUMBER | POSITION IN PACK | CYCLES COMPLETED | CELL TYPE: General Electric 3.0 Ampere-Hour<br>FAILURE ANALYSIS  |
|-------------|--------------------|-----------------------|------------------|-------------|------------------|------------------|--|
| 43          | 15%                | 3.0                   | 40°              | 436         | 7                | 2515             | Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Poor Roll, Uneven Wind at End of Roll, Shorts at Top of Roll, Separator Deteriorated. |
| 44          | 25%                | 3.0                   | 40°              | 435         | 10               | 2656             | Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Separator Impregnated with Neg Plate Material, Separator Deteriorated.                |
|             |                    |                       | 40°              | 222         | 6                | 1672             | Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused By Overheating From Poor Tab Weld.                                    |

| PACK NUMBER | DEPTH OF DISCHARGE | ORBIT PERIOD (HOURS) | TEST TEMPERATURE | CELL NUMBER | POSITION IN PACK | CYCLES COMPLETED | CELL TYPE: Could 3.5 Ampere-Hour FAILURE ANALYSIS   |
|-------------|--------------------|----------------------|------------------|-------------|------------------|------------------|---|
| 3           | 25%                | 1.5                  | 25°              | 73          | 5                | 2785             | Low Volt Disch, High Volt Chg, Short Near Center of Core, Piece of Pos Plate Material Between Plates Causing Short Through Separator.                                   |
|             |                    |                      |                  | 54          | 2                | 3090             | Low Volt Disch, Low Volt Chg, Leaked, Lost 1.7 gm, Weak Weld on Neg Tab to Plate.   |
|             |                    |                      |                  | 165         | 9                | 4081             | Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.7 gm, Deposit on Glass Seal, Short Through Separator, Short at Pos Tab Near Center of Core, Neg Tab Weld to Plate Weak. |
|             |                    |                      |                  | 93          | 6                | 4289             | Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.6 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.                                |
|             |                    |                      |                  | 97          | 7                | 4401             | Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.5 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.                                |
|             |                    |                      |                  | 77          | 4                | 4751             | Low Volt Disch, Normal Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates.                                       |
| 4           | 40%                | 1.5                  | 25°              | 188         | 10               | 4751             | Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.1 gm, Neg Plate Material on Separator.  |
|             |                    |                      |                  | 81          | 7                | 1609             | Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, High Pres Bulge Top.  |
|             |                    |                      |                  | 90          | 8                | 1827             | Low Volt Disch, Low Volt Chg, Leaked, Lost 2.7 gm, High Pres Bulge Top.   |
|             |                    |                      |                  | 2           | 1                | 2110             | Low Volt Disch, Low Volt Chg, Separator Deteriorated at Center of Core, Under Pressure When Opened.   |
|             |                    |                      |                  |             |                  |                  |   |



| PACK<br>NUMBER | PERCENT<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gould 3.5 Ampere-Hour<br>FAILURE<br>ANALYSIS  |
|----------------|----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|--|
| 4              | 40%                  | 1.5                     | 25°                 | 43             | 6                   | 2954                | Low Volt Disch, Low Volt Chg, Leaked, Lost 1.3 gm, Plate Material on Separator.  |
|                |                      |                         | 25°                 | 27             | 3                   | 3029                | Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated.  |
|                |                      |                         | 25°                 | 198            | 10                  | 3164                | Low Volt Disch, Low Volt Chg, Leaked, Lost 1.6 gm, Separator Deteriorated, Pos Plate Material Between Plates.  |
| 7              | 25%                  | 3.0                     | 25°                 | 49             | 2                   | *3007               | Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.7 gm, Neg Plate Material Migrated Through Separator, Separator Deteriorated, One Weak Weld Pos Tab to Plate. |
| 8              | 40%                  | 3.0                     | 25°                 | 68             | 6                   | 1346                | Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Plate Material on Separator.  |
|                |                      |                         | 25°                 | 112            | 8                   | 1704                | Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, Pos Tab Weld to Bottom of Can Weak, Pos Tab Weld to Plate Weak.  |
|                |                      |                         | 25°                 | 39             | 1                   | 1985                | Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Neg Plate Material on Separator.   |
|                |                      |                         | 25°                 | 170            | 10                  | 1985                | Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Pos and Neg Tab Weld Weak to Plates Near Center of Core, Separator Deteriorated at Center of Core.                       |
|                |                      |                         | 25°                 | 78             | 7                   | 2138                | Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Pos Tab Weld to Case Weak, Separator Deteriorated, Neg Plate Material Penetrated Separator.               |
|                |                      |                         | 25°                 | 41             | 2                   | 2494                | Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.7 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, One Bad Weld Neg Tab to Plate.          |
|                |                      |                         | 25°                 | 130            | 9                   | 2494                | Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Separator Deteriorated, Pos and Neg Plate Material Impregnated Separator.                                 |

\* FAILED DURING THIS REPORTING PERIOD

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gould 3.5 Ampere-Hour<br>FAILURE<br>ANALYSIS  |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|--|
| 27             | 15%                   | 1.5                     | 40°                 | 13             | 3                   | 2901                | Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Separator Deteriorated, Pos Plate Material on Separator.  |
|                |                       |                         |                     | 195            | 8                   | 2901                | Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.6 gm, Short Through Separator, Separator Burned at Center of Core, Pos Plate Material on Separator.      |
|                |                       |                         |                     | 103            | 7                   | 2998                | Low Volt Disch, Normal Volt Chg, High Pres, Short Through Separator, Pieces of Pos Plate Material Between Plates.  |
|                |                       |                         |                     | 200            | 10                  | 3270                | Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.5 gm, Short Through Separator, Separator Deteriorated at Center of Core, Pos Tab Weld to Case Weak.      |
|                |                       |                         |                     | 197            | 9                   | 4102                | Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Short at Pos Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator. |
|                |                       |                         |                     | 11             | 2                   | 4885                | Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Separator Impregnated with Neg Plate Material.                           |
| 28             | 25%                   | 1.5                     | 50°                 | 122            | 2                   | 408                 | Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Weak Bottom Weld Suspicious Spot but not Definite.   |
|                |                       |                         |                     | 157            | 7                   | 484                 | Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, High Pres Bulge.   |
|                |                       |                         |                     | 158            | 8                   | 484                 | Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.9 gm, High Pres Bulge Top.   |
|                |                       |                         |                     | 141            | 5                   | 860                 | Low Volt Disch, High Volt Chg, Leaked, Lost 3.5 gm.  |
|                |                       |                         |                     | 168            | 10                  | 1293                | Low Volt Disch, High Volt Chg, Weak Weld to Bottom of Case.  |
|                |                       |                         |                     |                |                     |                     |  |

| PAGE NUMBER | DEPTH OF DISCHARGE | CHARGE PERIOD (HOURS) | TEST TEMPERATURE | CELL NUMBER | POSITION IN PACK | CYCLES COMPLETED | CELL TYPE: Gould 3.5 Ampere-Hour<br>FAILURE ANALYSIS  |
|-------------|--------------------|-----------------------|------------------|-------------|------------------|------------------|---|
| 28          | 25%                | 1.5                   | 40°              | 121         | 1                | 1811             | Low Volt Disch, Low Volt Chg, Short at Outside End of Plates, Grid Wire Penetrated Separator.   |
|             |                    |                       | 40°              | 133         | 3                | 1811             | Low Volt Disch, High Volt Chg, Weak Weld on Pos Tab to Case.  |
|             |                    |                       | 40°              | 140         | 4                | 1811             | Low Volt Disch, Low Volt Chg, Short Around Pos Tab, Blistering on Pos Plate, Active Neg Plate Material on Separator.  |
|             |                    |                       | 40°              | 155         | 6                | 1811             | Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case.   |
|             |                    |                       | 40°              | 163         | 9                | 1811             | Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case, Deposit on Glass Seal.  |
| 31          | 15%                | 3.0                   | 40°              | R166        | 9                | 1500             | Low Volt Disch, Low Volt Chg, Leaked, Lost 7.1 gm, Separator Deteriorated.  |
|             |                    |                       | 40°              | R179        | 10               | 1500             | Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Short Through Separator, Separator Deteriorated, One Weak Tab.   |
|             |                    |                       | 40°              | R92         | 2                | 1696             | Low Volt Disch, High Volt Chg, Pieces of Plate Material Shorted Through Separator, Separator Deteriorated.  |
|             |                    |                       | 40°              | 126         | 3                | 2411             | Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Short Through Separator by Piece of Pos Plate Material Between Plates, Separator Deteriorated, Neg Plate Material Impregnated Separator, Tab to Plate Weld Poor. |
|             |                    |                       | 40°              | R162        | 8                | 2477             | Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 2.4 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, Pinpoint Penetration, Poor Weld Pos Tab to Case.  |
|             |                    |                       | 40°              | 72          | 1                | 2517             | Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.8 gm, Short Between Plates, Extra Piece of Pos. Plate Between Plates Separator Deteriorated, Pos Tabs to Plate Weld Both Weak.   |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | CHARGE PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gould 3.5 Ampere-Hour<br>FAILURE<br>ANALYSIS   |  |
|----------------|-----------------------|--------------------------|---------------------|----------------|---------------------|---------------------|---|--|
|                |                       |                          |                     |                |                     |                     | Low Volt Disch, Low Volt Chg, Short Through Separator at Start<br>of Core, Extra Piece of Pos Plate Material, Separator Impregnated<br>with Neg Plate Material, Separator Deteriorated, Neg Tab Weld to<br>Pigtail Weak, One Tab to Pos Plate Weld Weak, Still Under Pressure<br>When Opened. |  |
| 31             | 15%                   | 3.0                      | 40°                 | 143            | 6                   | 2517                | Low Volt Disch, Normal Volt Chg, Bottom Weld Weak, Greenish<br>Corrosion Inside at Neg Lead.  |  |
| 32             | 25%                   | 3.0                      | 40°                 | 125            | 6                   | 138                 | Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.5 gm, Bad Glass<br>Seal Around Neg Terminal.  |  |
|                |                       |                          | 40°                 | 1              | 1                   | 800                 | Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, Shorts<br>Near Center of Core.  |  |
|                |                       |                          | 40°                 | 67             | 4                   | 875                 | Low Volt Disch, Low Volt Chg, Leaked, Lost 2.2 gm, Short Around<br>Tabs, Pos Tab Weld Weak to Case.   |  |
|                |                       |                          | 40°                 | 132            | 7                   | 875                 | Failed During Shut Down to Move to Another Chamber, Leaked, Lost<br>4.4 gm, High Pres. Neg Tabs Pushed Out of Cell, Short at Center<br>and Outside Edge of Core.  |  |
|                |                       |                          | 40°                 | 149            | 9                   | 974                 | Low Volt Disch, High Volt Chg, Leaked, Lost 1.1 gm, Piece of<br>Pos Plate Material Shorted Through Separator, Weak Welds to<br>Case and Plates.   |  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | CHARGE PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Sonotone 5.0 Ampere-Hour<br>FAILURE<br>ANALYSIS   |
|----------------|-----------------------|--------------------------|---------------------|----------------|---------------------|---------------------|--|
| 1              | 25%                   | 1.5                      | 25°                 | 4361           | 4                   | 2995                | Low Volt Disch, High Volt Chg, Inclusion on Surface of Outside<br>Pos Plate Wore Hole Through Separator and Thin Outside Wrap,<br>Separator Sticking to Neg Plate, Glass Seal Leaked.  |
|                |                       |                          | 25°                 | 4335           | 1                   | 4423                | Low Volt Disch, High Volt Chg, Neg Tabs Weak Weld to Plates,<br>Separator Melted at Center of Core, Extreme Pressure Points on<br>Separator From Scoring Causing High Resistance Shorts.                                     |
| 2              | 40%                   | 1.5                      | 25°                 | 811            | 10                  | 3155                | Shorted on Cycling, Leaked Around Seal, High Pressure Bulge on<br>Bottom, Insulators Brittle, Exposed Grid Wires at Center of Core<br>Penetrated Separator Causing Large Burned Area at Short, Pos and<br>Neg Tab Weld Poor. |
|                |                       |                          | 25°                 | 3628           | 5                   | 3992                | Low Volt Disch, Normal Volt Chg, Leaked Around Seal, High Pres<br>Bulge on Bottom, Hole in Separator Exposing Pos and Neg Plates,<br>Neg Plate Material Penetrated Separator.  |
|                |                       |                          | 25°                 | 3613           | 2                   | 4411                | Low Volt Disch, Low Volt Chg, Two Pieces of Neg Plate Material<br>Wore Hole in Separator at Scoring Mark, Burned Through Plates,<br>Neg Tab Welds Poor, Separator Beginning to Deteriorate.                                  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | CHARGE PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Sonotone 5.0 Ampere-Hour<br>FAILURE<br>ANALYSIS   |
|----------------|-----------------------|--------------------------|---------------------|----------------|---------------------|---------------------|--|
| 6              | 40%                   | 3.0                      | 25°                 | 4324           | 8                   | 1069                | Low Volt Disch, Normal Volt Chg, Separator Impregnated With Active Material, Separator Sticking to Neg Plate.  |
|                |                       |                          | 25°                 | 6904           | 10                  | 1136                | Low Volt Disch, Low Volt Chg, Small Hole in Separator at Start of Coil, Pos Plate Edge Broken Allowing Grid Wire to Penetrate Separator.   |
|                |                       |                          | 25°                 | 3637           | 4                   | 1161                | Grid Wires of Pos Plate Penetrated Separator and Shorted to Neg Plate, Active Plate Material Penetrated Separator at Three Points, Bad Tab Welds.  |
| 26             | 25%                   | 1.5                      | 40°                 | 4323           | 1                   | 2487                | Grid Wire Penetrated Separator at Tabs.  |
|                |                       |                          | 40°                 | 6773           | 9                   | 2902                | Shorted on Cycling, Slight Burn Adjacent to Neg Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator, Tab Welds Weak.  |
|                |                       |                          | 40°                 | 7224           | 6                   | 2993                | Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Neg Tab Weld Weak, Neg Plate Material Penetrated Separator.   |
|                |                       |                          | 40°                 | 7232           | 7                   | 2993                | Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Pos Tab Weld Weak, Plate Broken at Pos Tab, Deep Pressure Points From Scoring, Separator Completely Deteriorated. |
|                |                       |                          | 40°                 | 4881           | 3                   | 3344                | Shorted on Cycling, Complete Short From Deep Scoring, Plate Shorted Through Outer Wrap.  |
|                |                       |                          | 40°                 | 4240           | 4                   | 3625                | Low Volt Disch, Low Volt Chg, Separator Deteriorated, Plate Material Penetrated Separator.   |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Sonotone 5.0 Ampere Hour<br>FAILURE<br>ANALYSIS   |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|--|
| 29             | 15%                   | 3.0                     | 40°                 | 3626           | 1                   | 1418                | Shorted on Cycling, Neg Tab Welds Poor, Active Plate Material<br>Penetrated Separator at Scoring Marks.                                |
| 30             | 25%                   | 3.0                     | 40°                 | 3657           | 7                   | 855                 | Hole in Separator Allowing Pos Plate to Hit Case, Separator Damaged<br>at Center of Cell Allowing Pos and Neg Plate to Short Together. |
| 49             | 15%                   | 1.5                     | 0°                  | 6887           | 9                   | 2010                | Low Volt Disch, Low Volt Chg, Burn on Separator Opposite Pos Tab.  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gulton 6.0 Ampere-Hour<br>FAILURE<br>ANALYSIS  |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|---|
| 13             | 25%                   | 1.5                     | 25°                 | 2305           | 1                   | 308                 | Low Volt Disch, High Volt Chg, Lost 12 gm, CO <sub>2</sub> Top Ceramic, High Pres Bulge.  |
|                |                       |                         | 25°                 | 2355           | 10                  | 502                 | Low Volt Disch, High Volt Chg, Lost 10 gm, High Pres Bulge.   |
|                |                       |                         | 25°                 | 3134           | 5                   | 2969                | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.  |
|                |                       |                         | 25°                 | 3211           | 7                   | 3084                | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.  |
|                |                       |                         | 25°                 | 2613           | 4                   | 3598                | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Separator Deteriorated.   |
|                |                       |                         | 25°                 | 2324           | 2                   | 4021                | Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.                                  |
| 14             | 40%                   | 1.5                     | 25°                 | 1623           | 4                   | 262                 | Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres Bulge.   |
|                |                       |                         | 25°                 | 1635           | 5                   | 262                 | Voltage Fell Off During Charge, Went Flat in 3 Min. on Disch, Lost 6 gm, Concave Wall, High Pres. Bulge, Ceramic Broken Inside Case, CO <sub>2</sub> on Outside of Ceramic, Pos Terminal Loose. |
|                |                       |                         | 25°                 | 2356           | 1                   | 450                 | Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres.   |
|                |                       |                         | 25°                 | 2387           | 2                   | 1113                | Low Volt Disch, High Volt Chg, Ceramic Short.   |
|                |                       |                         | 25°                 | 2391           | 3                   | 1618                | Low Volt Disch, Low Volt Chg, Ceramic Short.  |
|                |                       |                         | 25°                 | 3208           | 7                   | 2086                | Low Volt Disch, Normal Volt Chg, Ceramic Short.   |



| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | CHARGE PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gulton 6.0 Ampere-Hour   |   |
|----------------|-----------------------|--------------------------|---------------------|----------------|---------------------|---------------------|---|---|
|                |                       |                          |                     |                |                     |                     | FAILURE   | ANALYSIS  |
| 17             | 25%                   | 3.0                      | 25°                 | 1862           | 5                   | 721                 | Low Volt Disch, High Volt Chg, Ceramic Short.   | Low Volt Disch, High Volt Chg, Ceramic Short.   |
|                |                       |                          |                     | 1823           | 3                   | 721                 | Low Volt Disch, High Volt Chg, High Pres Bulge, Burnt Spct on Neg Plate Near Bottom Second From End, Ceramic Short.           | Low Volt Disch, High Volt Chg, High Pres Bulge, Burnt Spct on Neg Plate Near Bottom Second From End, Ceramic Short.           |
|                |                       |                          |                     | 2348           | 10                  | 1688                | Low Volt Disch, Low Volt Chg, Ceramic Short.  | Low Volt Disch, Low Volt Chg, Ceramic Short.  |
|                |                       |                          |                     | 1757           | 1                   | 2375                | Low Volt Disch, Low Volt Chg, Ceramic Short, Deposit Around Ceramic Seal, High Pres Bulge.                                    | Low Volt Disch, Low Volt Chg, Ceramic Short, Deposit Around Ceramic Seal, High Pres Bulge.                                    |
|                |                       |                          |                     | 1598           | 2                   | 2449                | Low Volt Disch, Low Volt Chg, Pinpoint Penetration of Separator, Blistering on Pos Plate, High Pres Bulge.                    | Low Volt Disch, Low Volt Chg, Pinpoint Penetration of Separator, Blistering on Pos Plate, High Pres Bulge.                    |
| 18             | 40%                   | 3.0                      | 25°                 | 2347           | 9                   | 2885                | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pressure Bulge, Still Under Pressure When Opened. | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pressure Bulge, Still Under Pressure When Opened. |
|                |                       |                          |                     | 1826           | 6                   | 365                 | Low Volt Disch, Chg Volt Normal, Lost 3 gm, Concave Wall, Ceramic Short.  | Low Volt Disch, Chg Volt Normal, Lost 3 gm, Concave Wall, Ceramic Short.  |
|                |                       |                          |                     | 1615           | 3                   | 608                 | Low Volt Disch, Normal Volt Chg, Deposit on Top of Pos Terminal, Lost 5.1 gm, High Pres Bulge.                                | Low Volt Disch, Normal Volt Chg, Deposit on Top of Pos Terminal, Lost 5.1 gm, High Pres Bulge.                                |
|                |                       |                          |                     | 1827           | 7                   | 643                 | Low Volt Disch, High Volt Chg, High Pres Bulge, Ceramic Short.  | Low Volt Disch, High Volt Chg, High Pres Bulge, Ceramic Short.  |
|                |                       |                          |                     | 2228           | 9                   | 643                 | Low Volt Disch, High Volt Chg, Ceramic Short.   | Low Volt Disch, High Volt Chg, Ceramic Short.   |
|                |                       |                          | 25°                 | 1562           | 5                   | 1145                | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.  | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.  |
|                |                       |                          |                     | 1233           | 1                   | 1550                | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Neg Plate Material on Separator.                        | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Neg Plate Material on Separator.                        |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gulton 6.0 Ampere-Hour<br>FAILURE<br>ANALYSIS   |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|--|
| 37             | 15%                   | 1.5                     | 50°                 | 1764           | 3                   | 238                 | Low Volt Disch, Volt Did Not Increase on Following Chg, (1.00 V)<br>Lost 4 gm, Ceramic Short.                          |
|                |                       |                         | 40°                 | 1784           | 8                   | 1566                | Low Volt Disch, Low Volt Chg, Lost 10.5 gm, Ceramic Short.   |
|                |                       |                         | 40°                 | 1802           | 4                   | 2819                | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos<br>Plate.   |
|                |                       |                         | 40°                 | 2333           | 10                  | 2981                | Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on<br>Pos Plates.   |
|                |                       |                         | 40°                 | 1769           | 7                   | 4897                | Low Volt Disch, Normal Volt Chg, Ceramic Short, Leaked, Lost<br>1 gm, Blistering on Pos Plate, Separator Deteriorated. |
| 38             | 25%                   | 1.5                     | 50°                 | 1454           | 8                   | 37                  | No Volt on Chg or Disch, Ceramic Short.  |
|                |                       |                         | 50°                 | 1815           | 6                   | 114                 | Volt Fell Off During Disch, Chg Volt Slightly Low, Lost 3.5 gm,<br>Ceramic Short.                                      |
|                |                       |                         | 40°                 | 1853           | 9                   | 187                 | Rev on Disch, Chg Volt Normal, Lost 4 gm, Deposits Around Pos<br>Terminal (Outside), Ceramic Short.                    |
|                |                       |                         | 40°                 | 1627           | 3                   | 225                 | Low Volt Disch, High Volt Chg on Cycle 219, Dead on 225, Lost<br>3.5 gm.   |
|                |                       |                         | 40°                 | 2405           | 5                   | 1333                | Low Volt Disch, Normal Volt Chg, Pos Bus Shorted to Case.  |
|                |                       |                         | 40°                 | 1626           | 2                   | 1377                | Low Volt Disch, Low Volt Chg, High Pres Bulge, Ceramic Short.  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gulton 6.0 Ampere-Hour<br>FAILURE<br>ANALYSIS   |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|--|
| 41             | 15%                   | 3.0                     | 40°                 | 1771           | 9                   | 649                 | Low Volt Disch, High Volt Chg, Ceramic Short.  |
|                |                       |                         | 40°                 | 1701           | 6                   | 1062                | Low Volt Disch, Normal Volt Chg, Ceramic Short.  |
|                |                       |                         | 40°                 | 3135           | 2                   | 1132                | Low Volt Disch, Normal Volt Chg, Ceramic Short.  |
|                |                       |                         | 40°                 | 1852           | 7                   | 1157                | Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on<br>Pos Plates.                             |
|                |                       |                         | 40°                 | 2221           | 8                   | 1157                | Low Volt Disch, Normal Volt Chg, Ceramic Short.  |
|                |                       |                         | 40°                 | 1632           | 3                   | 1689                | Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on<br>Pos Plates.                             |
| 42             | 25%                   | 3.0                     | 50°                 | 2309           | 8                   | 96                  | Low Volt Disch, Normal Volt Chg, Ceramic Short.  |
|                |                       |                         | 40°                 | 2346           | 7                   | 382                 | Low Volt Disch, Low Volt Chg, CO <sub>3</sub> on Bottom of Case, Ceramic<br>Short.                       |
|                |                       |                         | 40°                 | 2306           | 9                   | 416                 | Low Volt Disch, High Volt Chg, Ceramic Short.  |
|                |                       |                         | 40°                 | 918            | 1                   | 484                 | Low Volt Disch, Low Volt Chg, High Pres Bulge, Deposit on Bottom<br>of Case, Ceramic Short, Lost 3.1 gm. |

| PACK NUMBER | DEPTH OF DISCHARGE | ORBIT PERIOD (HOURS) | TEST TEMPERATURE | CELL NUMBER | POSITION IN PACK | CYCLES COMPLETED | CELL TYPE: Gulton 6.0 Ampere-Hour<br>FAILURE ANALYSIS  |
|-------------|--------------------|----------------------|------------------|-------------|------------------|------------------|--|
| 61          | 15%                | 1.5                  | 0°               | 1622        | 2                | 1                | Volt Between 0.25 and 0.3 V Throughout Cycle, Side Concave, Burnt Case, End Neg Pushed Into Pos Tab. Cell Replaced in Pack Due to Early Failure. |
|             |                    |                      |                  | 1845        | 8                | 6                | Lost 5 gm, Leak at Weld on Bottom, High Pres Bulge, Cell Replaced in Pack Due to Early Failure.  |
|             |                    |                      |                  | 2397        | 5                | 2762             | Low Volt Disch, Low Volt Chg, Ceramic Short.   |
|             |                    |                      |                  | 1825        | 4                | 4094             | Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.           |
|             |                    |                      |                  | 2311        | 10               | 4285             | Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.           |
|             |                    |                      |                  | 2400        | 6                | 4413             | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.  |
| 62          | 25%                | 1.5                  | 0°               | 1630        | 10               | 2995             | Low Volt Disch, High Volt Chg, Leaked, Lost 6.8 gm, Ceramic Seal Broke, Deposit on Inside of Ceramic, High Pres Bulge, Blistering on Pos Plates. |
|             |                    |                      |                  | 1792        | 4                | 4066             | Low Volt Disch, Low Volt Chg, Small Shorts Through Separator Near Pos Tab, Blistering on Pos Plate, Separator Deteriorated.                      |
|             |                    |                      |                  | 1806        | 5                | 4441             | Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gulton 6.0 Ampere-Hour<br>FAILURE<br>ANALYSIS  |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|---|
| 66             | 25%                   | 3.0                     | 0°                  | 1794           | 6                   | 1045                | Low Volt Disch, High Volt Chg, High Pres Bulge, Concave Side,<br>Ceramic Broken, No Seal, Lost 5.1 gm, Pos Bus Against Case.  |
|                |                       |                         | 0°                  | 1843           | 8                   | 1173                | Low Volt Disch, Low Volt Chg, Wall Concave, Ceramic Short.  |
|                |                       |                         | 0°                  | 1781           | 5                   | 1237                | Low Volt Disch, High Volt Chg, High Pres Bulge, Deposit Around<br>Pos Terminal, Ceramic Broken on Pos Terminal, Blisters on Pos<br>Plate, Burnt Spot on Separator at Blisters, Lost 1.3 gm. |
|                |                       |                         | 0°                  | 1634           | 3                   | 1417                | Low Volt Disch, Normal Volt Chg, Ceramic Short, High Pres Bulge,<br>One Side Concave Other Convex, Pos Plates Blistered, Lost 2.3 gm.   |
|                |                       |                         | 0°                  | 1823           | 7                   | 2122                | Low Volt Disch, Low Volt Chg, Leaked, Lost 7.8 gm, Separator<br>Impregnated with Neg Plate Material, Blistering on Pos Plates,<br>High Pres Bulge, One Side Concave.                        |

| PACK NUMBER | DEPTH OF DISCHARGE | ORBIT PERIOD (HOURS) | TEST TEMPERATURE | CELL NUMBER | POSITION IN PACK | CYCLES COMPLETED | CELL TYPE: General Electric 12.0 Ampere-Hour  |  |
|-------------|--------------------|----------------------|------------------|-------------|------------------|------------------|---|--|
|             |                    |                      |                  |             |                  |                  | FAILURE ANALYSIS  |  |
| 93          | 50%                | 24.0                 | 40°              | 204         | 1                | 266              | Cell Lost Capacity on Cycling But Came Back When Removed From Pack, So It Was Put Back on Cycling in Same Pack.                             |  |
|             |                    |                      | 40°              | 208         | 2                | 266              | Low Volt Disch, Normal Volt Chg, Was Opened Up But Did Not Show Anything to be Wrong With Cell, Failure Due to Loss of Capacity.            |  |
|             | 40%                | 1.5                  | 25°              | 445         | 3                | 3822             | Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.                                |  |
|             |                    |                      | 25°              | 446         | 2                | 4020             | Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.                                |  |
| 99          |                    |                      | 25°              | 442         | 4                | 4020             | Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.                                |  |
|             | 25%                | 1.5                  | 40°              | 429         | 3                | 3841             | Shorted on Cycling, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator, Leaked at Neg Terminal, Epoxy Lifted Up. |  |
|             |                    |                      | 40°              | 432         | 2                | 3841             | Failed During Shut Down of Pack, Separator Deteriorated, Separator Impregnated with Neg Plate Material.                                     |  |
|             |                    |                      | 40°              | 440         | 1                | 4853             | Low Volt Disch, Low Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material.  |  |
| 124         | 25%                | 1.5                  | 0°               | 410         | 5                | 3037             | Cell Lost Capacity on Cycling But Came Back When Removed From Pack, So It Was Put Back On Cycling In Same Pack.                             |  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gulton 20 Ampere-Hour<br>FAILURE<br>ANALYSIS   |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|---|
| 73             | 25%                   | 1.5                     | 25°                 | 396            | 3                   | 1776                | Low Volt Disch, Normal Volt Chg, Concave Side, Neg Ceramic Seal Broken, Lost 23.7 gm.   |
| 74             | 25%                   | 3.0                     | 25°                 | 458            | 4                   | 1184                | Low Volt Disch, Low Volt Chg, Leaked, Lost 14.2 gm, Blistering on Pos Plates.   |
|                |                       |                         | 25°                 | 419            | 3                   | 1302                | Low Volt Disch, Normal Volt Chg, Leaked, Lost 21.9 gm.  |
|                |                       |                         | 25°                 | 440            | 2                   | 1754                | Low Volt Disch, Normal Volt Chg, Leaked Around Both Terminals, Ceramic Broken on Neg Terminal, Lost 18.0 gm, Neg Plate Material Penetrated Separator, Sides Concaved, Shorting Case to Bus. |
| 87             | 40%                   | 1.5                     | 25°                 | 468            | 1                   | 163                 | Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 8 gm.  |
|                |                       |                         | 25°                 | 388            | 2                   | 208                 | Low Volt Disch, High Volt Chg, Lost 26.7 gm, Ceramic Short Around Pos Terminal.   |
|                |                       |                         | 25°                 | 394            | 3                   | 627                 | Low Volt Disch, High Volt Chg, Lost 16.4 gm, High Pres Bulge, Deposit on Both Terminals, Ceramic Short, Neg to Case.  |
|                |                       |                         | 25°                 | 454            | 4                   | 627                 | Low Volt Disch, Low Volt Chg, Lost 21.6 gm, Deposit on Both Terminals, Sides Concave Hit Bus on Both Sides.   |
|                |                       |                         | 25°                 | 386            | 5                   | 627                 | Low Volt Disch, Low Volt Chg, Lost 18.1 gm, High Pres Bulge, Burnt Separator 5th or 6th Neg Plate Near Top, Ceramic Short.  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | CHARGE PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: <u>Culton 20 Ampere-Hour</u><br>FAILURE<br>ANALYSIS   |
|----------------|-----------------------|--------------------------|---------------------|----------------|---------------------|---------------------|--|
| 88             | 40%                   | 3.0                      | 25°                 | 422            | 2                   | 151                 | Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.   |
|                |                       |                          |                     | 404            | 1                   | 151                 | Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.   |
|                |                       |                          |                     | 466            | 3                   | 358                 | Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 16.4 gm.  |
|                |                       |                          |                     | 429            | 5                   | 358                 | Low Volt Disch, Low Volt Chg, Ceramic Short Around Pos Terminal.   |
|                |                       |                          |                     | 452            | 4                   | 2824                | Low Volt Disch, Low Volt Chg, Short Through Separator at Top of Plates, High Pres Bulge on Sides, High Pres, Separator Deteriorated. |
| 90             | 25%                   | 1.5                      | 40°                 | 457            | 5                   | 2824                | Low Volt Disch, Normal Volt Chg, Short Through Separator, Blistering on Pos Plate, High Pres Bulge on Sides, High Pres.              |
|                |                       |                          |                     | 378            | 3                   | 4045                | Normal Volt Disch, Went Dead on Chg During Cap Check, Ceramic Short, Separator Completely Deteriorated.                              |
|                |                       |                          |                     | 435            | 2                   | 3111                | Low Volt Disch, High Volt Chg, Leaked, Lost 24.6 gm, High Pres Bulge, Separator Very Dry.  |
|                |                       |                          |                     | 407            | 5                   | 3111                | Low Volt Disch, High Volt Chg, Leaked, Lost 20.4 gm, Separator Very Dry.   |
|                |                       |                          |                     | 438            | 4                   | 3629                | Low Volt Disch, High Volt Chg, Leaked, Lost 13.2 gm, High Pres Bulge, Sides Concave, Blistering on Pos Plates.                       |



| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gulton 20 Ampere-Hour<br>FAILURE<br>ANALYSIS  |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|--|
| 102            | 15%                   | 3.0                     | 0°                  | 449            | 2                   | 135                 | Volt Fell Suddenly at End of Chg, Burn Spots at Busses, Concave Around Spots, End Neg Pushed Into Pos Tab.                         |
| 115            | 25%                   | 1.5                     | 0°                  | 490            | 3                   | 2107                | Low Volt Disch, Normal Volt Chg, Walls Concave, Busses Shorted to Case, Lost 26.9 gm.  |
|                |                       |                         | 0°                  | 508            | 2                   | 2203                | High Pres Bulge, Blisters on Pos Plate, Busses Shorted to Case.  |
|                |                       |                         | 0°                  | 467            | 4                   | 2291                | Black Deposit on Outside on Neg Terminal, High Pres Bulge, Busses Shorted to Case, Blisters on Pos Plate, Burnt Spot on Separator. |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORBIT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Could 20 Ampere-Hour<br>FAILURE<br>ANALYSIS  |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|---|
| 98             | 25%                   | 1.5                     | 0°                  | 77             | 5                   | 3556                | Low Volt Disch, Low Volt Chg, Separator Deteriorated, Neg Plate Material Penetrated Separator, Two Pos Plates Not Welded to Tabs.   |
| 104            | 25%                   | 1.5                     | 25°                 | 69             | 1                   | 2672                | Low Volt Disch, Low Volt Chg, Shorted at Bottom of Pos Plate, Pos Grid Wire Penetrated Separator, Short at Top Between Pos Grid and Neg Tab, High Pressure.                           |
|                |                       |                         | 25°                 | R36            | 5                   | 2826                | Low Volt Disch, Low Volt Chg, Short Between Plates, Grid Wire Penetrated Separator, Pos Plate Material Between Plates, High Pressure.   |
|                |                       |                         | 25°                 | 5              | 3                   | 2980                | Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Short Between Plates, High Pressure.   |
| 112            | 15%                   | 1.5                     | 40°                 | 17             | 1                   | 5005                | Low Volt Disch, Low Volt Chg, Short Between Plates, Short About One Inch From Bottom of Plates, Separator Completely Deteriorated, High Pressure.                                     |
|                |                       |                         | 40°                 | 25             | 2                   | 5005                | Low Volt Disch, Low Volt Chg, Shorted Through Separator, Shorted on Bottom Corner of Plates, Separator Completely Deteriorated, High Pressure.  |
|                |                       |                         | 40°                 | 38             | 5                   | *5213               | Low Volt Disch, Low Volt Chg, Short at Top Corner of Plate Where Pos Tabs are Connected to Plates, Separator Deteriorated Allowing Plates to Come Together, Blistering on Pos Plates. |
| 118            | 40%                   | 1.5                     | 25°                 | 61             | 2                   | 1747                | Low Volt Disch, Low Volt Chg, Short at Bottom of Pos Plate, Grid Wires Penetrated Separator Where Tape Holds Plates Together, High Pressure.  |
|                |                       |                         | 25°                 | R91            | 4                   | 1963                | Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plates, Grid Wires Through Separator, Rough Grid Showing Through at Top and Bottom of Most Plates, High Pressure.       |
|                |                       |                         | 25°                 | 92             | 5                   | 2937                | Low Volt Disch, Low Volt Chg, Short Through Separator on Side of Plates, Pos Plate Material Penetrated Separator, High Pressure.  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | ORIENT PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Gould 20 Ampere-Hour<br>FAILURE<br>ANALYSIS  |
|----------------|-----------------------|--------------------------|---------------------|----------------|---------------------|---------------------|---|
| 119            | 40%                   | 3.0                      | 25°                 | 73             | 5                   | 222                 | Normal Volt Disch, Low Volt Chg, Short Near Bottom of 5th or 6th Pos, No Obvious Cause.   |
|                |                       |                          | 25°                 | 80             | 2                   | 1793                | Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.   |
|                |                       |                          | 25°                 | 86             | 3                   | 1793                | Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.   |
| 122            | 25%                   | 3.0                      | 40°                 | 16             | 2                   | 801                 | Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.                             |
|                |                       |                          | 40°                 | 58             | 3                   | 801                 | Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.                             |
|                |                       |                          | 40°                 | 18             | 5                   | 983                 | Low Volt Disch, Low Volt Chg, Plate Material Penetrated Separator, Pos Plates Blistered, High Pressure.   |
| 126            | 25%                   | 1.5                      | 40°                 | 9              | 3                   | 1273                | Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Neg Plate, Grid Wire Penetrated Separator, Several Other Plates Had Grid Wires Sticking Out, High Pressure. |
|                |                       |                          | 40°                 | R29            | 4                   | 1509                | Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plate, Grid Wire Penetrated Separator, Blistering on Pos Plates, Separator Deteriorated, High Pressure. |
|                |                       |                          | 40°                 | 11             | 5                   | 1569                | Low Volt Disch, Low Volt Chg, Shorted on Side of Pos Plate, Grid Wire Penetrated Separator, High Pressure.  |

| PACK NUMBER | DEPTH OF DISCHARGE | ORBIT PERIOD (HOURS) | TEST TEMPERATURE | CELL NUMBER | POSITION IN PACK | CYCLES COMPLETED | CELL TYPE: Gulton 50 Ampere-Hour<br>FAILURE ANALYSIS  |
|-------------|--------------------|----------------------|------------------|-------------|------------------|------------------|---|
| 95          | 25%                | 1.5                  | 0°               | 109         | 3                | *2643            | Shorted Out While Cycling, All Plates Shorted at Bottom Center, Separator Very Dry and Stiff From Heat, Blistering on Pos Plate.  |
|             |                    |                      | 0°               | 107         | 5                | *2938            | Shorted Out While Cycling, Short Between Plates at Center Near Bottom of Plates, Separator Dry, Small Amount of Neg Plate Material Migration on Separator.                              |
| 123         | 15%                | 1.5                  | 40°              | 115         | 1                | *3227            | Low Volt Disch, High Volt Chg, Separator Impregnated with Neg Plate Material, Large Blisters on Pos Plate, One Neg Plate Stuck to Can.  |
|             |                    |                      | 40°              | 119         | 2                | 1873             | Low Volt Disch, Low Volt Chg, Separator Decomposed, Hot Spots Through Separator Shorted Out Several Plates, High Pres Bulge, Still Under Pressure When Opened.                          |
|             |                    |                      | 40°              | 118         | 3                | 1873             | Went Dead During Shutdown, Separator Decomposed, Several Small Hot Spots on Each Plate, Outside Neg Plates Stuck to Case, High Pres Bulge, Deposit Around Ceramic Seal of Pos Terminal. |
|             |                    |                      | 40°              | 117         | 4                | 1873             | Went Dead During Shutdown, Separator Decomposed, Neg Plate Stuck to Case, High Pres Bulge, Still Under Pressure When Opened.  |

| PACK<br>NUMBER | DEPTH OF<br>DISCHARGE | CABIN PERIOD<br>(HOURS) | TEST<br>TEMPERATURE | CELL<br>NUMBER | POSITION<br>IN PACK | CYCLES<br>COMPLETED | CELL TYPE: Yardney 10 x YS-12<br>FAILURE<br>ANALYSIS |
|----------------|-----------------------|-------------------------|---------------------|----------------|---------------------|---------------------|--|
| 33             | 50%                   | 24                      | 40°                 |                | 3                   | 58                  | Leaked, Dried Out                                    |
|                |                       |                         | 40°                 |                | 2                   | 126                 | Leaked, Dried Out                                    |
|                |                       |                         | 40°                 |                | 1                   | 152                 | Leaked, Dried Out                                    |
|                |                       |                         | 40°                 |                | 8                   | 197                 | Leaked, Dried Out                                    |
|                |                       |                         | 40°                 |                | 4                   | 210                 | Leaked, Dried Out                                    |
|                |                       |                         | 40°                 |                | 10                  | 210                 | Leaked, Dried Out                                    |
|                |                       |                         | 0°                  |                | 1                   | 162                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         | 0°                  |                | 2                   | 162                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         | 0°                  |                | 10                  | 162                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         | 0°                  |                | 3                   | 166                 | Leaked, Electrolyte Shorted Out Cell                 |
| 57             | 50%                   | 24                      | 0°                  |                | 4                   | 166                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         | 0°                  |                | 5                   | 166                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         | 0°                  |                | 6                   | 166                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         | 0°                  |                | 7                   | 166                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         | 0°                  |                | 8                   | 166                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         | 0°                  |                | 9                   | 166                 | Leaked, Electrolyte Shorted Out Cell                 |
|                |                       |                         |                     |                |                     |                     |  |
|                |                       |                         |                     |                |                     |                     |  |
|                |                       |                         |                     |                |                     |                     |  |
|                |                       |                         |                     |                |                     |                     |  |

|                |    |                       |     |                         |    |                     |     |                |  |                     |  |                     |    |  |   |
|----------------|----|-----------------------|-----|-------------------------|----|---------------------|-----|----------------|--|---------------------|--|---------------------|----|--|---|
| PACK<br>NUMBER | 75 | DEPTH OF<br>DISCHARGE | 40% | ORBIT PERIOD<br>(HOURS) | 24 | TEST<br>TEMPERATURE | 25° | CELL<br>NUMBER |  | POSITION<br>IN PACK |  | CYCLES<br>COMPLETED | 32 | CELL TYPE: Delco 25 Ampere-Hour<br>FAILURE<br>ANALYSIS | Cell Blew-up, Pack Returned to Manufacturer |
|----------------|----|-----------------------|-----|-------------------------|----|---------------------|-----|----------------|--|---------------------|--|---------------------|----|--|---|

30.

## AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

| TYPE              | ORBIT PERIOD<br>(Hours) | DEPTH OF<br>DISCHARGE | TEMPERATURE<br>°C | PRECONDITIONING |             | CAPACITY CHECKS AFTER 88-DAY INTERVALS |                   |                  |                   |                  |                  |                    |                   | CYCLES TO<br>PACK FAILURE |
|-------------------|-------------------------|-----------------------|-------------------|-----------------|-------------|--|-------------------|------------------|-------------------|------------------|------------------|--------------------|-------------------|---------------------------|
|                   |                         |                       |                   | INITIAL         | *           | FIRST 88<br>DAYS                       | SECOND 88<br>DAYS | THIRD 88<br>DAYS | FOURTH 88<br>DAYS | FIFTH 88<br>DAYS | SIXTH 88<br>DAYS | SEVENTH 88<br>DAYS | EIGHTH 88<br>DAYS |                           |
| G.E.<br>3 A.H.    | 1.5                     | 15                    | 0                 | 3.48            |             | 3.15                                   | 3.12              | 3.05             | 3.02              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 0                 | 3.50            |             | 3.33                                   | 3.70              | 3.38             | 2.35              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 25                | 4.00            |             | 2.38                                   | 2.93              | 2.23             | 1.95              |                  |                  |                    |                   |                           |
|                   |                         | 40                    | 25                | 4.00            |             | 2.75                                   | 2.10              | 1.35             |                   |                  |                  |                    |                   |                           |
|                   |                         | 15                    | 50/40             | 1.65            | 2.13 (779)  | 2.10                                   | 1.53              | 1.25             | 1.17              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 50/40             | 1.80            | 2.50 (1440) | 0.58                                   | 0.88              |                  |                   |                  |                  |                    |                   |                           |
| G.E.<br>3 A.H.    | 3                       | 15                    | 0                 | 3.63            |             | 3.25                                   | 3.40              | 3.53             | 2.97              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 0                 | 3.50            |             | 3.25                                   | 3.53              | 3.40             | 3.21              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 25                | 3.93            |             | 3.78                                   | 3.42              | 3.15             | 3.00              |                  |                  |                    |                   |                           |
|                   |                         | 40                    | 25                | 3.73            |             | 3.00                                   | 2.35              | 2.07             | 1.83              |                  |                  |                    |                   |                           |
|                   |                         | 15                    | 50/40             | 1.77            | 2.63 (320)  | 2.20                                   | 1.61              | 1.65             |                   |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 50/40             | 1.60            | 2.00 (311)  | 1.35                                   | 1.19              | 1.15             | 1.10              |                  |                  |                    |                   |                           |
| Gould<br>3.5 A.H. | 1.5                     | 15                    | 0                 | 3.62            |             | 4.00                                   | 3.33              | 3.41             | 3.21              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 0                 | 3.33            |             | 3.85                                   | 2.53              | 3.13             | 3.30              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 25                | 4.00            |             | 2.62                                   | 2.92              | 3.27             |                   |                  |                  |                    |                   |                           |
|                   |                         | 40                    | 25                | 3.94            |             | 3.38                                   | 2.77              |                  |                   |                  |                  |                    |                   |                           |
|                   |                         | 15                    | 50/40             | 1.53            | 2.63 (779)  | 2.07                                   | 1.95              | 1.90             |                   |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 50/40             | 1.55            | 2.07 (1424) | 2.86                                   |                   |                  |                   |                  |                  |                    |                   |                           |
| Gould<br>3.5 A.H. | 3                       | 15                    | 0                 | 3.27            |             | 3.59                                   | 3.15              | 3.28             | 3.33              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 0                 | 3.50            |             | 3.91                                   | 3.53              | 3.65             | 3.41              |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 25                | 4.32            |             | 4.02                                   | 3.79              | 3.53             | 2.77              |                  |                  |                    |                   |                           |
|                   |                         | 40                    | 25                | 4.24            |             | 2.65                                   | 3.35              | 3.03             |                   |                  |                  |                    |                   |                           |
|                   |                         | 15                    | 50/40             | 1.60            | 1.51 (315)  | 1.75                                   | 1.98              | 2.16             |                   |                  |                  |                    |                   |                           |
|                   |                         | 25                    | 50/40             | 1.55            | 1.66 (315)  | 1.19                                   |                   |                  |                   |                  |                  |                    |                   |                           |

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

\*\* Still at 50° C.

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

| TYPE               | ORBIT PERIOD<br>(Hours) | DEPTH OF<br>DISCHARGE | TEMPERATURE<br>°C | PRECONDITIONING |            | CAPACITY CHECKS AFTER 88-DAY INTERVALS |                   |                  |                   |                  |                  |                    |                   | CYCLES TO<br>PACK FAILURE |      |
|--------------------|-------------------------|-----------------------|-------------------|-----------------|------------|--|-------------------|------------------|-------------------|------------------|------------------|--------------------|-------------------|---------------------------|------|
|                    |                         |                       |                   | INITIAL         | *          | FIRST 88<br>DAYS                       | SECOND 88<br>DAYS | THIRD 88<br>DAYS | FOURTH 88<br>DAYS | FIFTH 88<br>DAYS | SIXTH 88<br>DAYS | SEVENTH 88<br>DAYS | EIGHTH 88<br>DAYS |                           |      |
| Sonotone<br>5 A.H. | 1.5                     | 15                    | 0                 | 5.45            |            | 5.54                                   | 5.50              | 4.96             | 4.79              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 0                 | 5.04            |            | 4.96                                   | 4.58              | 4.25             | 3.79              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 25                | 5.42            |            | 3.67                                   | 2.33              | 2.88             | 2.79              |                  |                  |                    |                   |                           |      |
|                    |                         | 40                    | 25                | 6.42            |            | 4.38                                   | 4.17              | 3.25             | 3.00              |                  |                  |                    |                   |                           |      |
|                    |                         | 15                    | 50/40             | 3.08            | 3.63 (703) | 2.25                                   | 1.83              | 2.04             | 1.17              |                  |                  |                    |                   |                           |      |
| Sonotone<br>5 A.H. | 3                       | 25                    | 50/40             | 3.17            | 3.17 (445) | 2.75                                   | 2.93              |                  |                   |                  |                  |                    |                   |                           | 3625 |
|                    |                         | 15                    | 0                 | 5.67            |            | 5.79                                   | 5.67              | 5.42             | 5.33              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 0                 | 4.92            |            | 3.96                                   | 3.96              | 4.13             | 3.96              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 25                | 5.71            |            | 4.58                                   | 3.04              | 2.04             | 2.13              |                  |                  |                    |                   |                           |      |
|                    |                         | 40                    | 25                | 5.83            |            | 4.50                                   | 3.29              | 3.25             | 2.92              |                  |                  |                    |                   |                           |      |
| Gulton<br>6 A.H.   | 1.5                     | 15                    | 50/40             | 3.33            | 4.92 (223) | 2.75                                   | 2.38              | 2.42             | 2.08              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 50/40             | 3.75            | 3.50 (183) | 1.88                                   | 2.88              | 2.38             | 1.67              |                  |                  |                    |                   |                           |      |
|                    |                         | 15                    | 0                 | 5.00            |            | 5.10                                   | 5.40              | 4.45             | 3.15              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 0                 | 5.00            |            | 4.75                                   | 3.80              | 4.35             | 3.55              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 25                | 5.80            |            | 2.75                                   | 2.85              | 2.70             |                   |                  |                  |                    |                   |                           | 4021 |
| Gulton<br>6 A.H.   | 3                       | 40                    | 25                | 6.40            |            | 3.45                                   |                   |                  |                   |                  |                  |                    |                   |                           | 2086 |
|                    |                         | 15                    | 50/40             | 2.75            | 3.60 (239) | 1.70                                   | 2.95              | 1.85             | 2.00              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 50/40             | 2.65            | 2.90 (114) | 1.55                                   |                   |                  |                   |                  |                  |                    |                   |                           | 1377 |
|                    |                         | 15                    | 0                 | 4.50            |            | 5.45                                   | 5.35              | 5.15             | 4.50              |                  |                  |                    |                   |                           |      |
|                    |                         | 25                    | 0                 | 4.25            |            | 5.00                                   | 3.50              | 2.50             | 3.80              |                  |                  |                    |                   |                           |      |
| Gulton<br>6 A.H.   | 3                       | 25                    | 25                | 5.80            |            | 3.65                                   | 3.45              | 2.50             | 2.30              |                  |                  |                    |                   |                           | 2885 |
|                    |                         | 40                    | 25                | 4.55            |            | 4.95                                   | 3.16              |                  |                   |                  |                  |                    |                   |                           |      |
|                    |                         | 15                    | 50/40             | 2.75            | 4.55 (239) | 2.05                                   | 1.63              |                  |                   |                  |                  |                    |                   |                           | 1550 |
|                    |                         | 25                    | 50/40             | 2.60            | 3.80 (96)  | 2.15                                   | 2.10              | 2.35             | 1.85              |                  |                  |                    |                   |                           | 1689 |
|                    |                         | 25                    | 50/40             | 2.60            |            |  |                   |                  |                   |                  |                  |                    |                   |                           |      |

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.



## AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

| TYPE             | ORBIT PERIOD<br>(Hours) | DEPTH OF<br>DISCHARGE | TEMPERATURE<br>°C | PRECONDITIONING |             | CAPACITY CHECKS AFTER 88-DAY INTERVALS |                |               |                |               |               |                 |                | CYCLES TO<br>PACK FAILURE |
|------------------|-------------------------|-----------------------|-------------------|-----------------|-------------|--|----------------|---------------|----------------|---------------|---------------|-----------------|----------------|---------------------------|
|                  |                         |                       |                   | INITIAL         | *           | FIRST<br>DAYS                          | SECOND<br>DAYS | THIRD<br>DAYS | FOURTH<br>DAYS | FIFTH<br>DAYS | SIXTH<br>DAYS | SEVENTH<br>DAYS | EIGHTH<br>DAYS |                           |
| G.E.<br>12 A.H.  | 1.5                     | 15                    | 0                 | 13.9            |             | 12.7                                   | 10.4           | 13.0          | 12.5           |               |               |                 |                |                           |
|                  |                         | 25                    | 0                 | 14.2            |             | 13.5                                   | 12.9           | 12.8          | 11.4           |               |               |                 |                |                           |
|                  |                         | 25                    | 25                | 15.2            |             | 8.00                                   | 5.55           | 5.50          | 5.40           |               |               |                 |                |                           |
|                  |                         | 40                    | 25                | 14.8            |             | 6.00                                   | 7.65           |               |                |               |               |                 |                | 4020                      |
|                  |                         | 15                    | 50/40             | 6.80            | 8.20 (334)  | 5.00                                   | 4.70           | 5.00          | 4.90           |               |               |                 |                |                           |
| G.E.<br>12 A.H.  | 3                       | 25                    | 50/40             | 6.90            | 6.00 (195)  | 4.90                                   | 5.20           | 4.40          |                |               |               |                 |                | 4853                      |
|                  |                         | 15                    | 0                 | 14.2            |             | 13.2                                   | 10.7           | 11.0          | 12.1           |               |               |                 |                |                           |
|                  |                         | 25                    | 0                 | 14.6            |             | 13.0                                   | 12.1           | 11.9          | 12.2           |               |               |                 |                |                           |
|                  |                         | 25                    | 25                | 15.2            |             | 11.7                                   | 8.20           | 6.13          | 5.20           |               |               |                 |                |                           |
|                  |                         | 40                    | 25                | 14.9            |             | 5.60                                   | 5.86           | 7.90          | 8.20           |               |               |                 |                |                           |
| Gould<br>20 A.H. | 1.5                     | 15                    | 50/40             | 7.10            | 8.20 (205)  | 6.30                                   | 3.70           | 4.00          | 3.50           |               |               |                 |                |                           |
|                  |                         | 25                    | 50/40             | 7.00            | 9.80 (70)   | 3.80                                   | 4.70           | 5.70          | 5.10           |               |               |                 |                |                           |
|                  |                         | 15                    | 0                 | 22.5            |             | 27.7                                   | 26.5           | 24.2          | 24.7           |               |               |                 |                |                           |
|                  |                         | 25                    | 0                 | 23.1            |             | 21.2                                   | 15.2           | 18.7          | 17.2           |               |               |                 |                | 2980                      |
|                  |                         | 25                    | 25                | 25.0            |             | 18.5                                   | 14.0           |               |                |               |               |                 |                | 2937                      |
| Gould<br>20 A.H. | 3                       | 40                    | 25                | 24.7            |             | 23.3                                   |                |               |                |               |               |                 |                |                           |
|                  |                         | 15                    | 50/40             | 9.67            | 6.83 (183)  | 15.7                                   | 15.3           | 12.5          | 12.4           |               |               |                 |                | 1574                      |
|                  |                         | 25                    | 50/40             | 9.00            | 13.9 (1316) | 15.2                                   |                |               |                |               |               |                 |                |                           |
|                  |                         | 15                    | 0                 | 23.0            |             | 23.2                                   | 21.5           | 20.3          |                |               |               |                 |                |                           |
|                  |                         | 25                    | 0                 | 23.0            |             | 17.5                                   | 25.0           | 18.2          | 18.8           |               |               |                 |                |                           |
| Gould<br>20 A.H. | 3                       | 25                    | 25                | 23.3            |             | 23.5                                   | 22.2           | 21.3          | 21.2           |               |               |                 |                |                           |
|                  |                         | 40                    | 25                | 24.8            |             | 24.7                                   | 21.7           |               |                |               |               |                 |                | 1793                      |
|                  |                         | 15                    | 50/40             | 9.50            | 9.67 (47)   | 11.8                                   | 14.8           | 16.8          | 15.2           |               |               |                 |                |                           |
|                  |                         | 25                    | 50/40             | 9.33            | 7.50 (756)  | 8.17*                                  |                |               |                |               |               |                 |                | 983                       |
|                  |                         | 25                    | 50/40             | 9.33            |             |  |                |               |                |               |               |                 |                |                           |

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

\*\* Still at 50° C.

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

| TYPE               | ORBIT PERIOD<br>(Hours) | DEPTH OF<br>DISCHARGE | TEMPERATURE<br>°C | PRECONDITIONING |            | CAPACITY CHECKS AFTER 88-DAY INTERVALS |                   |                  |                   |                  |                  |                    |                   | CYCLES TO<br>PACK FAILURE |
|--------------------|-------------------------|-----------------------|-------------------|-----------------|------------|--|-------------------|------------------|-------------------|------------------|------------------|--------------------|-------------------|---------------------------|
|                    |                         |                       |                   | INITIAL         | *          | FIRST 88<br>DAYS                       | SECOND 88<br>DAYS | THIRD 88<br>DAYS | FOURTH 88<br>DAYS | FIFTH 88<br>DAYS | SIXTH 88<br>DAYS | SEVENTH 88<br>DAYS | EIGHTH 88<br>DAYS |                           |
| Gulton<br>20 A.H.  | 1.5                     | 15                    | 0                 | 17.2            |            | 12.5                                   | 5.67              |                  |                   |                  |                  |                    |                   | 3631                      |
|                    |                         | 25                    | 0                 | 17.7            |            | 11.2                                   |                   |                  |                   |                  |                  |                    |                   | 2288                      |
|                    |                         | 25                    | 25                | 23.3            |            | 7.17                                   | 9.50              | 7.83             | 8.67              |                  |                  |                    |                   | 627                       |
|                    |                         | 40                    | 25                | 23.3            |            |  |                   |                  |                   |                  |                  |                    |                   |                           |
| Gulton<br>20 A.H.  | 3                       | 15                    | 50/40             | 10.3            | 13.8 (172) | 6.50                                   | 4.83              | 5.50             | 4.67              |                  |                  |                    |                   | 4045                      |
|                    |                         | 25                    | 50/40             | 9.00            | 11.3 (65)  | 6.00                                   | 10.3              | 7.33*            |                   |                  |                  |                    |                   |                           |
|                    |                         | 15                    | 0                 | 16.7            |            | 18.8                                   | 25.2              | 20.3             | 19.5              |                  |                  |                    |                   | 1754                      |
|                    |                         | 25                    | 0                 | 21.7            |            | 20.7                                   | 21.8              | 19.3             | 17.5              |                  |                  |                    |                   |                           |
| Yardney<br>12 A.H. | 24                      | 25                    | 25                | 20.3            |            | 6.17                                   | 7.17              |                  |                   |                  |                  |                    |                   | 358                       |
|                    |                         | 40                    | 25                | 19.8            |            |  |                   |                  |                   |                  |                  |                    |                   |                           |
|                    |                         | 15                    | 50/40             | 9.50            | 12.7 (71)  | 7.33                                   | 5.33              | 4.83             | 5.33              |                  |                  |                    |                   | 166                       |
|                    |                         | 25                    | 50/40             | 9.17            | 10.3 (47)  | 6.67                                   | 6.67              | 7.67             | 6.83              |                  |                  |                    |                   |                           |
| Gulton<br>6 A.H.   | 24                      | 50                    | 0                 | 13.8            |            | 8.60                                   |                   |                  |                   |                  |                  |                    |                   | 210                       |
|                    |                         | 50                    | 40                | 13.5            |            | 12.0                                   |                   |                  |                   |                  |                  |                    |                   |                           |
|                    |                         | 50                    | 25                | 6.60            |            | 3.55                                   | 4.40              | 4.25             |                   |                  |                  |                    |                   |                           |
|                    |                         |                       |                   |                 |            |  |                   |                  |                   |                  |                  |                    |                   |                           |
| G.E.<br>12 A.H.    | 24                      |                       |                   |                 |            |  |                   |                  |                   |                  |                  |                    |                   |                           |
|                    |                         | 50                    | 40 ***            | 13.0            |            | 7.60                                   | (40°C)<br>6.50    |                  |                   |                  |                  |                    |                   |                           |
|                    |                         |                       |                   |                 |            |  |                   |                  |                   |                  |                  |                    |                   |                           |
|                    |                         |                       |                   |                 |            |  |                   |                  |                   |                  |                  |                    |                   |                           |
| Gulton<br>50 A.H.  | 1.5                     | 25                    | 0                 | 54.6            |            | 59.6                                   | 45.4              |                  |                   |                  |                  |                    |                   | 3127                      |
|                    |                         |                       |                   |                 |            |  |                   |                  |                   |                  |                  |                    |                   |                           |

\* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

\*\* Two cells only; pack failed during capacity check.

\*\*\* Changed from 25° to 40° C ambient after 173 cycles.

# AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

| TYPE                        | ORBIT PERIOD<br>(Hours) | DEPTH OF<br>DISCHARGE | TEMPERATURE<br>°C | INITIAL<br>PRECONDI-<br>TIONING | CAPACITY CHECKS AFTER 88-DAY INTERVALS |                   |                  |                   |                  |                  |                    |                   |                  |                  | CYCLES TO<br>PACK FAILURE |  |
|-----------------------------|-------------------------|-----------------------|-------------------|---------------------------------|--|-------------------|------------------|-------------------|------------------|------------------|--------------------|-------------------|------------------|------------------|---------------------------|--|
|                             |                         |                       |                   |                                 | FIRST 88<br>DAYS                       | SECOND 88<br>DAYS | THIRD 88<br>DAYS | FOURTH 88<br>DAYS | FIFTH 88<br>DAYS | SIXTH 88<br>DAYS | SEVENTH 88<br>DAYS | EIGHTH 88<br>DAYS | NINTH 88<br>DAYS | TENTH 88<br>DAYS |                           |  |
| Gulton<br>(Comm.)<br>4 A.H. | 1.5                     | 15                    | 0                 | 5.04                            | 3.57                                   | 4.03              |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 25                    | 0                 | 4.97                            | 4.00                                   | 3.87              |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 25                    | 25                | 4.63                            | 2.47                                   | 2.07              |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 40                    | 25                | 5.00                            | 2.00                                   | 2.07              |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 15                    | 40                | 4.20                            | 1.77                                   | 1.67              |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 25                    | 40                | 3.37                            | 1.17                                   | 1.13              |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
| Gulton<br>12 A.H.           | 1.5                     | 15                    | 0                 | 14.0                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 25                    | 0                 | 14.2                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 25                    | 25                | 14.1                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 40                    | 25                | 13.3                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 15                    | 40                | 6.80                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 25                    | 40                | 11.4                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
| Gulton<br>(HSI)<br>6 A.H.   | 1.5                     | 25                    | 0                 | 7.30                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 40                    | 25                | 6.90                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |
|                             |                         | 25                    | 40                | 5.00                            |  |                   |                  |                   |                  |                  |                    |                   |                  |                  |                           |  |

| MFR.                      | CAPACITY<br>A. H. | PACK<br>NO. | TEMP.<br>°C. | ORBIT PERIOD (HRS.) |        | PERCENT<br>DEPTH OF<br>DISCHARGE | PERCENT<br>OF<br>RECHARGE | CHARGE<br>VOLTAGE<br>LIMIT | CYCLES COVERED |        | CELLS REMAIN-<br>ING IN PACK |       |
|---------------------------|-------------------|-------------|--------------|---------------------|--------|----------------------------------|---------------------------|----------------------------|----------------|--------|------------------------------|-------|
|                           |                   |             |              | DISCHARGE           | CHARGE |                                  |                           |                            | INITIAL        | FINAL  | INITIAL                      | FINAL |
| G.E.<br>(pages)<br>41-49  | 3                 | 63          | 0            | 0.5                 | 1.0    | 15                               | 115                       | 1.55                       | 6474           | 6875   | 401                          | 10    |
|                           |                   | 64          | 0            | "                   | "      | 25                               | "                         | "                          | 6402           | 6773   | 371                          | 10    |
|                           |                   | 15          | 25           | "                   | "      | 25                               | 125                       | 1.49                       | 6468           | 6871   | 401                          | 10    |
|                           |                   | 16          | 25           | "                   | "      | 40                               | "                         | "                          |                | FAILED |                              |       |
|                           |                   | 39          | 40           | "                   | "      | 15                               | 160                       | 1.45                       | 6095           | 6498   | 408                          | 9     |
|                           |                   | 40          | 40           | "                   | "      | 25                               | "                         | 1.41                       |                | FAILED |                              |       |
|                           |                   | 67          | 0            | "                   | 2.5    | 15                               | 115                       | 1.55                       | 3071           | 3294   | 223                          | 10    |
|                           |                   | 68          | 0            | "                   | "      | 25                               | "                         | "                          | 3076           | 3267   | 191                          | 10    |
|                           |                   | 17          | 25           | "                   | "      | 25                               | 125                       | 1.49                       | 3046           | 3269   | 223                          | 10    |
|                           |                   | 20          | 25           | "                   | "      | 40                               | "                         | "                          | 2853           | 3082   | 224                          | 10    |
| Gould<br>(pages)<br>50-54 | 3.5               | 43          | 40           | "                   | "      | 15                               | 160                       | 1.45                       |                | FAILED |                              |       |
|                           |                   | 44          | 40           | "                   | "      | 25                               | "                         | "                          | 2840           | 3031   | 191                          | 9     |
|                           |                   | 51          | 0            | "                   | 1.0    | 15                               | 115                       | 1.55                       | 6491           | 6892   | 401                          | 10    |
|                           |                   | 52          | 0            | "                   | "      | 25                               | "                         | "                          | 6422           | 6853   | 371                          | 10    |
|                           |                   | 3           | 25           | "                   | "      | 25                               | 125                       | 1.49                       |                | FAILED |                              |       |
|                           |                   | 4           | 25           | "                   | "      | 40                               | "                         | "                          |                | FAILED |                              |       |
|                           |                   | 27          | 40           | "                   | "      | 15                               | 160                       | 1.45                       |                | FAILED |                              |       |
|                           |                   | 28          | 40           | "                   | "      | 25                               | "                         | "                          |                | FAILED |                              |       |
|                           |                   | 55          | 0            | "                   | 2.5    | 15                               | 115                       | 1.55                       | 3071           | 3294   | 223                          | 10    |
|                           |                   | 56          | 0            | "                   | "      | 25                               | "                         | "                          | 3060           | 3219   | 159                          | 10    |
|                           |                   | 7           | 25           | "                   | "      | 25                               | 125                       | 1.49                       | 3007           | 3170   | 163                          | 9     |
|                           |                   | 8           | 25           | "                   | "      | 40                               | "                         | "                          |                | FAILED |                              |       |
|                           |                   | 31          | 40           | "                   | "      | 15                               | 160                       | 1.45                       |                | FAILED |                              |       |
|                           |                   | 32          | 40           | "                   | "      | 25                               | "                         | 1.41                       |                | FAILED |                              |       |

| MFR.                | CAPACITY<br>A. H. | PACK<br>NO. | TEMP<br>°C. | ORBIT PERIOD (HRS) |        | PERCENT<br>DEPTH OF<br>DISCHARGE | PERCENT<br>OF<br>RECHARGE | CHARGE<br>VOLTAGE<br>LIMIT | CYCLES COVERED |        |            | CELLS REMAIN-<br>ING IN PACK<br>INITIAL FIN L |
|---------------------|-------------------|-------------|-------------|--------------------|--------|----------------------------------|---------------------------|----------------------------|----------------|--------|------------|---|
|                     |                   |             |             | DISCHARGE          | CHARGE |                                  |                           |                            | INITIAL        | FINAL  | DIFFERENCE |   |
| SONOTONE<br>(55-65) | 5                 | 49          | 0           | 0.5                | 1.0    | 15                               | 115                       | 1.55                       | 6192           | 6605   | 413        | 9   |
|                     |                   | 50          | 0           | "                  | "      | 25                               | "                         | "                          | 6147           | 6345   | 197        | 10  |
|                     |                   | 1           | 25          | "                  | "      | 25                               | 125                       | 1.49                       | 6033           | 6448   | 415        | 8   |
|                     |                   | 2           | 25          | "                  | "      | 40                               | "                         | "                          | 5424           | 5747   | 323        | 5   |
|                     |                   | 25          | 40          | "                  | "      | 15                               | 160                       | 1.45                       | 5776           | 6363   | 387        | 10  |
|                     |                   | 26          | 40          | "                  | "      | 25                               | "                         | "                          |                | FAILED |            |   |
|                     |                   | 53          | 0           | "                  | 2.5    | 15                               | 115                       | 1.55                       | 2919           | 3142   | 223        | 10  |
|                     |                   | 54          | 0           | "                  | "      | 25                               | "                         | "                          | 2949           | 3172   | 223        | 10  |
|                     |                   | 5           | 25          | "                  | "      | 25                               | 125                       | 1.47                       | 2976           | 3155   | 179        | 10  |
|                     |                   | 6           | 25          | "                  | "      | 40                               | "                         | "                          | 2853           | 3076   | 223        | 7   |
|                     |                   | 59          | 40          | "                  | "      | 15                               | 160                       | 1.45                       | 2862           | 3060   | 198        | 9   |
|                     |                   | 60          | 40          | "                  | "      | 25                               | "                         | "                          | 2932           | 3020   | 198        | 7   |
| GULTON<br>(66-71)   | 6                 | 61          | 0           | "                  | 1.0    | 15                               | 115                       | 1.55                       | 5620           | 6000   | 380        | 6   |
|                     |                   | 62          | 0           | "                  | "      | 25                               | "                         | "                          | 5777           | 5973   | 196        | 7   |
|                     |                   | 13          | 25          | "                  | "      | 25                               | 125                       | 1.49                       |                | FAILED |            |   |
|                     |                   | 14          | 25          | "                  | "      | 40                               | "                         | "                          |                | FAILED |            |   |
|                     |                   | 37          | 40          | "                  | "      | 15                               | 160                       | 1.45                       | 4907           | 5304   | 397        | 5   |
|                     |                   | 23          | 40          | "                  | "      | 25                               | "                         | "                          |                | FAILED |            |   |
|                     |                   | 65          | 0           | "                  | 2.5    | 15                               | 115                       | 1.55                       | 3051           | 3274   | 223        | 10  |
|                     |                   | 66          | 0           | "                  | "      | 25                               | "                         | "                          | 2771           | 2994   | 223        | 5   |
|                     |                   | 17          | 25          | "                  | "      | 25                               | 125                       | 1.49                       |                | FAILED |            |   |
|                     |                   | 18          | 25          | "                  | "      | 40                               | "                         | "                          |                | FAILED |            |   |
|                     |                   | 21          | 40          | "                  | "      | 15                               | 160                       | 1.45                       |                | FAILED |            |   |
|                     |                   | 40          | 40          | "                  | "      | 25                               | "                         | "                          | 2628           | 2804   | 176        | 6   |

| MFR.                      | CAPACITY<br>A. H. | PACK<br>NO. | TEMP.<br>°C. | ORBIT PERIOD (HRS.) |     | PERCENT<br>DEPTH OF<br>DISCHARGE | PERCENT<br>OF<br>RECHARGE | CHARGE<br>VOLTAGE<br>LIMIT | CYCLES COVERED |        | CELLS REMAINING IN PACK |   |
|---------------------------|-------------------|-------------|--------------|---------------------|-----|----------------------------------|---------------------------|----------------------------|----------------|--------|-------------------------|---|
|                           |                   |             |              |                     |     |                                  |                           |                            |                |        |                         |   |
| G.E.<br>(pages<br>72-81)  | 12                | 110         | 0            | 0.5                 | 1.0 | 15                               | 115                       | 1.55                       | 5820           | 6220   | 400                     | 5 |
|                           |                   | 124         | 0            | "                   | "   | 25                               | "                         | "                          | 5625           | 5987   | 357                     | 5 |
|                           |                   | 82          | 25           | "                   | "   | 25                               | 125                       | 1.49                       | 6028           | 6256   | 227                     | 5 |
|                           |                   | 96          | 25           | "                   | "   | 40                               | "                         | "                          |                | FAILED |                         |   |
|                           |                   | 85          | 40           | "                   | "   | 15                               | 160                       | 1.45                       | 5727           | 6081   | 354                     | 5 |
|                           |                   | 99          | 40           | "                   | "   | 25                               | "                         | "                          |                | FAILED |                         |   |
|                           |                   | 111         | 0            | "                   | 2.5 | 15                               | 115                       | 1.55                       | 2715           | 3131   | 216                     | 5 |
|                           |                   | 125         | 0            | "                   | "   | 25                               | "                         | "                          | 2914           | 3105   | 191                     | 5 |
|                           |                   | 53          | 25           | "                   | "   | 25                               | 125                       | 1.49                       | 2956           | 3179   | 222                     | 5 |
|                           |                   | 77          | 25           | "                   | "   | 40                               | "                         | "                          | 2946           | 3169   | 223                     | 5 |
|                           |                   | 56          | 40           | "                   | "   | 15                               | 160                       | 1.45                       | 2872           | 3079   | 207                     | 5 |
|                           |                   | 100         | 40           | "                   | "   | 25                               | "                         | "                          | 2739           | 2962   | 223                     | 5 |
| GOULD<br>(pages<br>82-88) | 20                | 84          | 0            | "                   | 1.0 | 15                               | 115                       | 1.55                       | 5804           | 6170   | 366                     | 5 |
|                           |                   | 98          | 0            | "                   | "   | 25                               | "                         | "                          | 5611           | 5949   | 338                     | 4 |
|                           |                   | 104         | 25           | "                   | "   | 25                               | 125                       | 1.49                       |                | FAILED |                         |   |
|                           |                   | 118         | 25           | "                   | "   | 40                               | "                         | "                          |                | FAILED |                         |   |
|                           |                   | 112         | 40           | "                   | "   | 15                               | 160                       | 1.45                       | 5006           | 5211   | 205                     | 3 |
|                           |                   | 126         | 40           | "                   | "   | 25                               | "                         | 1.41                       |                | FAILED |                         |   |
|                           |                   | 20          | 0            | "                   | 2.5 | 15                               | 115                       | 1.55                       | 2884           | 3107   | 223                     | 5 |
|                           |                   | 94          | 0            | "                   | "   | 25                               | "                         | "                          | 2755           | 2953   | 197                     | 5 |
|                           |                   | 105         | 25           | "                   | "   | 25                               | 125                       | 1.49                       | 2737           | 2935   | 197                     | 5 |
|                           |                   | 119         | 25           | "                   | "   | 40                               | "                         | "                          |                | FAILED |                         |   |
|                           |                   | 108         | 40           | "                   | "   | 15                               | 160                       | 1.45                       | 2715           | 2937   | 222                     | 5 |
|                           |                   | 122         | 40           | "                   | "   | 25                               | "                         | 1.41                       |                | FAILED |                         |   |

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| MFR.                | CAPACITY<br>A. H. | PACK<br>NO. | TEMP<br>°C. | ORBIT PERIOD (HRS) |        | PERCENT<br>DEPTH OF<br>DISCHARGE | PERCENT<br>OF<br>RECHARGE | CHARGE<br>VOLTAGE<br>LIMIT | CYCLES COVERED |       | CELLS REMAIN-<br>ING IN PACK |       |
|---------------------|-------------------|-------------|-------------|--------------------|--------|----------------------------------|---------------------------|----------------------------|----------------|-------|------------------------------|-------|
|                     |                   |             |             | DISCHARGE          | CHARGE |                                  |                           |                            | INITIAL        | FINAL | INITIAL                      | FINAL |
| YARDNEY             | 12                | 57          | 0           | 1.0                | 23.0   | 50                               | *                         | 1.50                       | FAILED         |       |                              |       |
|                     |                   | 33          | 40          | "                  | "      | "                                | *                         | 1.50                       | FAILED         |       |                              |       |
| GULTON<br>(page 95) | 6                 | 79          | 25          | 1.0                | 23.0   | 50                               | 200                       | 1.49                       | 293            | 316   | 23                           | 3     |
|                     |                   |             |             |                    |        |                                  |                           |                            |                |       |                              |       |
| G.E.<br>(page 96)   | 12                | 93          | 25*         | 1.0                | 23.0   | 50                               | 200**                     | 1.49**                     | 266            | 287   | 21                           | 3 1/4 |
|                     |                   |             |             |                    |        |                                  |                           |                            |                |       |                              |       |
| GULTON<br>(page 96) | 50                | 95          | 0           | 0.5                | 1.0    | 25                               | 115                       | 1.55                       | 3217           | 3227  | 10                           | 3 0   |
|                     |                   | 102         | 10          | "                  | "      | 15                               | 160                       | 1.45                       | FAILED         |       |                              |       |
| DELCO<br>(pages 97) | 25                | 75          | 25          | 1.0                | 23.0   | 40                               | *                         | 1.97                       | FAILED         |       |                              |       |
|                     |                   | 89          | 25          | "                  | "      | "                                | *                         | "                          | FAILED         |       |                              |       |
| DELCO<br>(pages 97) | 40                | 275         | 25          | 1.0                | 23.0   | 25                               | *                         | 1.97                       | 90             | 114   | 24                           | 3 3   |
|                     |                   |             |             |                    |        |                                  |                           |                            |                |       |                              |       |

\* DOES NOT APPLY  
 \*\* CHARGED TO 40°C, 1.45 V/CELL LIMIT AFTER CYCLE 173.  
 \*\*\* CHARGED TO 25.0% RECHARGE AT 250% RECHARGE



| MFR.                         | CAPACITY<br>A. H. | PACK<br>NO. | TEMP<br>°C. | ORBIT PERIOD (HRS) |        | PERCENT<br>DEPTH OF<br>DISCHARGE | PERCENT<br>OF<br>RECHARGE | CHARGE<br>VOLTAGE<br>LIMIT | CYCLES COVERED |       |            | CELLS REMAIN-<br>ING IN PACK |
|------------------------------|-------------------|-------------|-------------|--------------------|--------|----------------------------------|---------------------------|----------------------------|----------------|-------|------------|------------------------------|
|                              |                   |             |             | DISCHARGE          | CHARGE |                                  |                           |                            | INITIAL        | FINAL | DIFFERENCE |                              |
| GULTON<br>(pages<br>98-103)  | 4                 | 315         | 0           | 0.5                | 1.0    | 15                               | 115                       | 1.55                       | 2987           | 3353  | 366        | 5                            |
|                              |                   | 326         | 0           | "                  | "      | 25                               | "                         | "                          | 2991           | 3359  | 368        | 5                            |
|                              |                   | 204         | 25          | "                  | "      | 25                               | 125                       | 1.49                       | 2853           | 3176  | 323        | 5                            |
|                              |                   | 214         | 25          | "                  | "      | 40                               | "                         | "                          | 2530           | 2898  | 368        | 5                            |
|                              |                   | 228         | 40          | "                  | "      | 15                               | 160                       | 1.45                       | 2854           | 3165  | 311        | 5                            |
|                              |                   | 240         | 40          | "                  | "      | 25                               | "                         | "                          | 2856           | 3179  | 323        | 5                            |
|                              |                   | 216         | 0           | "                  | "      | 15                               | 115                       | 1.55                       | 1              | 57    | 56         | 5                            |
|                              |                   | 301         | 0           | "                  | "      | 25                               | 115                       | 1.55                       | 629            | 1082  | 453        | 5                            |
|                              |                   | 227         | 25          | "                  | "      | 25                               | 125                       | 1.49                       | 49             | 452   | 403        | 5                            |
|                              |                   | 226         | 25          | "                  | "      | 40                               | 125                       | 1.49                       | 890            | 1305  | 415        | 5                            |
| GULTON<br>(pages<br>104-109) | 12                | 223         | 40          | "                  | "      | 15                               | 160                       | 1.45                       | 639            | 1016  | 377        | 5                            |
|                              |                   | 210         | 40          | "                  | "      | 25                               | "                         | "                          | 893            | 1310  | 417        | 5                            |
|                              |                   | 213         | 0           | "                  | "      | 25                               | 115                       | 1.55                       | 1              | 49    | 48         | 5                            |
|                              |                   | 218         | 25          | "                  | "      | 40                               | 125                       | 1.49                       | 1              | 55    | 54         | 5                            |
|                              |                   | 238         | 40          | "                  | "      | 25                               | 160                       | 1.45                       | 1              | 55    | 54         | 5                            |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
| GULTON<br>(pages<br>110-112) | (HSI) 6           |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |
|                              |                   |             |             |                    |        |                                  |                           |                            |                |       |            |                              |

PACK NO. 63  
G.E. 3 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 0.90

CELL VOLTAGES

|       | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |                  |
|-------|------|------|------|------|------|------|------|------|------|------|------------------|
| 6496. | 1.24 | 1.25 | 1.24 | 1.23 | 1.24 | 1.23 | 1.23 | 1.25 | 1.23 | 1.23 | END OF DISCHARGE |
| 6539. | 1.24 | 1.24 | 1.24 | 1.23 | 1.23 | 1.23 | 1.23 | 1.24 | 1.25 | 1.23 |                  |
| 6592. | 1.21 | 1.20 | 1.20 | 1.19 | 1.20 | 1.20 | 1.20 | 1.22 | 1.20 | 1.20 |                  |
| 6624. | 1.23 | 1.23 | 1.24 | 1.22 | 1.23 | 1.22 | 1.23 | 1.24 | 1.22 | 1.22 |                  |
| 6656. | 1.24 | 1.25 | 1.25 | 1.23 | 1.24 | 1.23 | 1.24 | 1.25 | 1.24 | 1.23 |                  |
| 6698. | 1.24 | 1.25 | 1.24 | 1.23 | 1.24 | 1.23 | 1.24 | 1.25 | 1.23 | 1.23 |                  |
| 6720. | 1.24 | 1.25 | 1.25 | 1.23 | 1.24 | 1.23 | 1.24 | 1.25 | 1.23 | 1.23 |                  |
| 6752. | 1.23 | 1.24 | 1.24 | 1.22 | 1.23 | 1.23 | 1.23 | 1.24 | 1.22 | 1.22 |                  |
| 6780. | 1.23 | 1.23 | 1.23 | 1.21 | 1.22 | 1.21 | 1.22 | 1.23 | 1.21 | 1.21 |                  |
| 6815. | 1.24 | 1.24 | 1.24 | 1.23 | 1.24 | 1.23 | 1.23 | 1.25 | 1.23 | 1.22 |                  |
| 6843. | 1.25 | 1.24 | 1.25 | 1.23 | 1.24 | 1.23 | 1.23 | 1.25 | 1.23 | 1.22 |                  |
| 6875. | 1.23 | 1.24 | 1.25 | 1.24 | 1.26 | 1.26 | 1.26 | 1.29 | 1.26 | 1.26 |                  |

|       |      |      |      |      |      |      |      |      |      |      |               |
|-------|------|------|------|------|------|------|------|------|------|------|---------------|
| 6496. | 1.61 | 1.47 | 1.59 | 1.55 | 1.63 | 1.61 | 1.51 | 1.61 | 1.47 | 1.51 | END OF CHARGE |
| 6539. | 1.61 | 1.48 | 1.60 | 1.55 | 1.63 | 1.62 | 1.51 | 1.61 | 1.47 | 1.50 |               |
| 6592. | 1.58 | 1.43 | 1.55 | 1.50 | 1.59 | 1.57 | 1.47 | 1.57 | 1.43 | 1.47 |               |
| 6624. | 1.61 | 1.47 | 1.60 | 1.54 | 1.63 | 1.61 | 1.51 | 1.61 | 1.46 | 1.50 |               |
| 6656. | 1.62 | 1.47 | 1.60 | 1.55 | 1.63 | 1.62 | 1.51 | 1.62 | 1.47 | 1.51 |               |
| 6698. | 1.62 | 1.47 | 1.60 | 1.55 | 1.63 | 1.62 | 1.51 | 1.62 | 1.47 | 1.51 |               |
| 6720. | 1.62 | 1.48 | 1.61 | 1.55 | 1.64 | 1.62 | 1.51 | 1.62 | 1.47 | 1.51 |               |
| 6752. | 1.55 | 1.45 | 1.52 | 1.51 | 1.57 | 1.56 | 1.48 | 1.56 | 1.44 | 1.47 |               |
| 6780. | 1.59 | 1.45 | 1.55 | 1.53 | 1.60 | 1.60 | 1.50 | 1.60 | 1.45 | 1.50 |               |
| 6815. | 1.63 | 1.48 | 1.61 | 1.55 | 1.63 | 1.62 | 1.51 | 1.63 | 1.47 | 1.51 |               |
| 6843. | 1.62 | 1.46 | 1.62 | 1.52 | 1.65 | 1.62 | 1.48 | 1.62 | 1.46 | 1.48 |               |
| 6875. | 1.60 | 1.48 | 1.62 | 1.56 | 1.66 | 1.64 | 1.54 | 1.64 | 1.50 | 1.53 |               |

PACK NO. 64  
G.E. 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT  
VOLTAGE 1.50

CELL VOLTAGES

| 1   | 2   | 3   | 4   | 5   | 6  | 7  | 8  | 9  | 10   |
|---|---|---|---|---|--|--|--|--|--|
| 6426. 11.00 1.50 1.21 1.21 1.21 1.21 1.21 1.20 1.20 1.20 1.19 | 6467. 11.01 1.50 1.22 1.21 1.21 1.21 1.21 1.20 1.20 1.20 1.19 | 6468. 11.02 1.50 1.21 1.21 1.21 1.21 1.21 1.20 1.20 1.20 1.19 | 6469. 11.03 1.51 1.20 1.21 1.20 1.20 1.20 1.21 1.20 1.20 1.18 | 6470. 11.04 1.51 1.20 1.20 1.20 1.21 1.20 1.21 1.20 1.20 1.19 | 6504. 12.04 1.51 1.21 1.21 1.21 1.21 1.21 1.22 1.21 1.20 | 6623. 12.14 1.51 1.22 1.22 1.22 1.21 1.22 1.23 1.22 1.20 | 6650. 12.09 1.51 1.22 1.22 1.22 1.21 1.21 1.22 1.21 1.20 | 6682. 12.10 1.51 1.22 1.22 1.22 1.21 1.21 1.22 1.21 1.19 | 6708. 11.08 1.51 1.20 1.20 1.20 1.19 1.19 1.20 1.19 1.18 |
| 6773. 12.13 1.51 1.22 1.22 1.21 1.21 1.21 1.22 1.22 1.22 1.20 |   |   |   |   |  |  |  |  |  |

END OF  
DISCHARGE

42

END OF  
CHARGE

|   |   |  |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|--|
| 6426. 15.17 .36 1.52 1.51 1.51 1.53 1.54 1.47 1.47 1.57 1.51 1.56 | 6467. 15.11 .40 1.52 1.50 1.50 1.52 1.54 1.47 1.47 1.57 1.50 1.55 | 6498. 15.06 .52 1.62 1.58 1.63 1.63 1.50 1.51 1.66 1.60 1.64 | 6535. 15.23 .41 1.52 1.51 1.51 1.53 1.47 1.46 1.56 1.51 1.54 | 6554. 15.30 .44 1.52 1.51 1.51 1.53 1.47 1.47 1.59 1.51 1.56 | 6584. 15.45 .50 1.54 1.57 1.56 1.58 1.49 1.49 1.62 1.53 1.59 | 6626. 15.73 .39 1.58 1.59 1.61 1.61 1.49 1.49 1.66 1.56 1.61 | 6650. 15.55 .40 1.56 1.58 1.58 1.58 1.48 1.48 1.63 1.54 1.60 | 6682. 15.83 .39 1.57 1.55 1.59 1.61 1.49 1.49 1.65 1.56 1.62 | 6708. 15.02 .43 1.50 1.52 1.50 1.54 1.45 1.45 1.53 1.48 1.52 |
| 6773. 15.72 .32 1.56 1.58 1.55 1.60 1.61 1.48 1.48 1.64 1.54 1.61 |   |  |  |  |  |  |  |  |  |

PACK NO. 15  
G.E. 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 1.50

CELL VOLTAGES  
4 5

6 7 8 9 10

END OF  
DISCHARGE

|       |       |      |      |      |      |      |      |      |      |      |      |      |
|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 6490. | 11.64 | 1.52 | 1.19 | 1.20 | 1.16 | 1.16 | 1.15 | 1.19 | 1.16 | 1.15 | 1.17 | 1.17 |
| 6523. | 11.60 | 1.51 | 1.19 | 1.20 | 1.17 | 1.17 | 1.16 | 1.20 | 1.16 | 1.16 | 1.17 | 1.17 |
| 6586. | 11.57 | 1.51 | 1.16 | 1.17 | 1.14 | 1.13 | 1.13 | 1.17 | 1.14 | 1.13 | 1.16 | 1.16 |
| 6618. | 11.62 | 1.52 | 1.18 | 1.18 | 1.16 | 1.15 | 1.14 | 1.18 | 1.15 | 1.14 | 1.17 | 1.16 |
| 6650. | 11.65 | 1.52 | 1.19 | 1.19 | 1.17 | 1.15 | 1.15 | 1.19 | 1.16 | 1.16 | 1.18 | 1.17 |
| 6692. | 11.66 | 1.51 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.19 | 1.16 | 1.16 | 1.17 | 1.17 |
| 6714. | 11.62 | 1.51 | 1.19 | 1.19 | 1.16 | 1.15 | 1.15 | 1.19 | 1.15 | 1.15 | 1.17 | 1.17 |
| 6746. | 11.61 | 1.51 | 1.18 | 1.18 | 1.16 | 1.15 | 1.15 | 1.19 | 1.15 | 1.14 | 1.17 | 1.16 |
| 6774. | 11.60 | 1.51 | 1.18 | 1.18 | 1.16 | 1.15 | 1.14 | 1.18 | 1.14 | 1.14 | 1.16 | 1.15 |
| 6809. | 11.61 | 1.51 | 1.18 | 1.18 | 1.16 | 1.15 | 1.15 | 1.18 | 1.15 | 1.14 | 1.17 | 1.15 |
| 6839. | 11.56 | 1.52 | 1.18 | 1.18 | 1.15 | 1.14 | 1.13 | 1.18 | 1.14 | 1.14 | 1.15 | 1.15 |
| 6871. | 11.57 | 1.52 | 1.17 | 1.18 | 1.15 | 1.15 | 1.14 | 1.18 | 1.14 | 1.14 | 1.16 | 1.15 |

END OF  
CHARGE

|       |       |     |      |      |      |      |      |      |      |      |      |      |
|-------|-------|-----|------|------|------|------|------|------|------|------|------|------|
| 6490. | 14.76 | .94 | 1.50 | 1.52 | 1.45 | 1.46 | 1.46 | 1.50 | 1.45 | 1.47 | 1.46 | 1.51 |
| 6533. | 14.76 | .90 | 1.50 | 1.52 | 1.46 | 1.47 | 1.46 | 1.50 | 1.45 | 1.47 | 1.46 | 1.51 |
| 6586. | 14.73 | .89 | 1.47 | 1.49 | 1.43 | 1.44 | 1.44 | 1.48 | 1.43 | 1.45 | 1.45 | 1.50 |
| 6618. | 14.77 | .90 | 1.49 | 1.51 | 1.45 | 1.46 | 1.45 | 1.50 | 1.45 | 1.46 | 1.46 | 1.51 |
| 6650. | 14.77 | .91 | 1.50 | 1.52 | 1.46 | 1.47 | 1.46 | 1.51 | 1.46 | 1.47 | 1.46 | 1.51 |
| 6692. | 14.71 | .94 | 1.49 | 1.51 | 1.45 | 1.46 | 1.46 | 1.49 | 1.45 | 1.47 | 1.46 | 1.50 |
| 6714. | 14.80 | .90 | 1.50 | 1.52 | 1.46 | 1.47 | 1.46 | 1.50 | 1.45 | 1.47 | 1.47 | 1.52 |
| 6746. | 14.77 | .92 | 1.49 | 1.50 | 1.45 | 1.46 | 1.46 | 1.50 | 1.45 | 1.47 | 1.46 | 1.51 |
| 6774. | 14.75 | .87 | 1.49 | 1.50 | 1.45 | 1.46 | 1.45 | 1.49 | 1.44 | 1.46 | 1.45 | 1.52 |
| 6809. | 14.79 | .89 | 1.50 | 1.51 | 1.45 | 1.46 | 1.46 | 1.50 | 1.45 | 1.46 | 1.46 | 1.51 |
| 6839. | 14.80 | .94 | 1.49 | 1.51 | 1.46 | 1.46 | 1.45 | 1.49 | 1.45 | 1.46 | 1.46 | 1.52 |
| 6871. | 14.76 | .94 | 1.48 | 1.51 | 1.44 | 1.46 | 1.45 | 1.49 | 1.45 | 1.46 | 1.46 | 1.51 |

PACK NO. 39  
G.E. 3 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT  
VOLTAGE .90

CELL VOLTAGES  
1 2 3 4 5

6 7 8 9 10

END OF  
DISCHARGE

|       |      |     |      |     |      |      |      |      |     |      |      |      |
|-------|------|-----|------|-----|------|------|------|------|-----|------|------|------|
| 6117. | 8.22 | .90 | 1.16 | .00 | 1.19 | 1.19 | 1.19 | 1.16 | .00 | 1.16 | 1.19 | 1.18 |
| 6160. | 8.21 | .90 | 1.16 | .00 | 1.19 | 1.18 | 1.18 | 1.16 | .00 | 1.16 | 1.18 | 1.18 |
| 6213. | 8.10 | .90 | 1.14 | .00 | 1.16 | 1.15 | 1.15 | 1.12 | .00 | 1.12 | 1.14 | 1.14 |
| 6245. | 8.19 | .90 | 1.14 | .00 | 1.19 | 1.17 | 1.18 | 1.15 | .00 | 1.15 | 1.17 | 1.18 |
| 6277. | 8.19 | .90 | 1.15 | .00 | 1.19 | 1.19 | 1.18 | 1.17 | .00 | 1.17 | 1.17 | 1.18 |
| 6319. | 8.20 | .90 | 1.13 | .00 | 1.19 | 1.19 | 1.18 | 1.17 | .00 | 1.17 | 1.18 | 1.18 |
| 6341. | 8.18 | .90 | 1.16 | .00 | 1.19 | 1.17 | 1.18 | 1.15 | .00 | 1.15 | 1.18 | 1.18 |
| 6373. | 9.16 | .90 | 1.14 | .00 | 1.19 | 1.18 | 1.19 | 1.16 | .00 | 1.16 | 1.16 | 1.17 |
| 6401. | 8.14 | .90 | 1.13 | .00 | 1.18 | 1.16 | 1.18 | 1.15 | .00 | 1.15 | 1.15 | 1.17 |
| 6436. | 8.13 | .90 | 1.12 | .00 | 1.18 | 1.18 | 1.17 | 1.15 | .00 | 1.15 | 1.16 | 1.17 |
| 6465. | 8.14 | .90 | 1.14 | .00 | 1.18 | 1.17 | 1.17 | 1.16 | .00 | 1.16 | 1.14 | 1.16 |
| 6498. | 8.16 | .90 | 1.11 | .00 | 1.16 | 1.17 | 1.18 | 1.18 | .00 | 1.18 | 1.19 | 1.19 |

END OF  
CHARGE

|       |       |     |      |     |      |      |      |      |     |      |      |      |
|-------|-------|-----|------|-----|------|------|------|------|-----|------|------|------|
| 6117. | 9.96  | .72 | 1.43 | .00 | 1.43 | 1.42 | 1.43 | 1.42 | .00 | 1.42 | 1.42 | 1.42 |
| 6160. | 9.97  | .73 | 1.42 | .00 | 1.42 | 1.42 | 1.43 | 1.42 | .00 | 1.42 | 1.42 | 1.43 |
| 6213. | 9.88  | .73 | 1.38 | .00 | 1.37 | 1.37 | 1.37 | 1.37 | .00 | 1.37 | 1.37 | 1.38 |
| 6245. | 9.97  | .73 | 1.42 | .00 | 1.42 | 1.42 | 1.43 | 1.42 | .00 | 1.42 | 1.42 | 1.42 |
| 6277. | 9.98  | .72 | 1.43 | .00 | 1.43 | 1.43 | 1.43 | 1.43 | .00 | 1.43 | 1.42 | 1.43 |
| 6319. | 10.01 | .73 | 1.43 | .00 | 1.43 | 1.43 | 1.43 | 1.42 | .00 | 1.42 | 1.42 | 1.43 |
| 6341. | 10.01 | .73 | 1.44 | .00 | 1.43 | 1.43 | 1.43 | 1.42 | .00 | 1.42 | 1.43 | 1.43 |
| 6373. | 10.00 | .73 | 1.43 | .00 | 1.43 | 1.43 | 1.44 | 1.42 | .00 | 1.42 | 1.42 | 1.43 |
| 6401. | 9.98  | .73 | 1.42 | .00 | 1.42 | 1.42 | 1.43 | 1.42 | .00 | 1.42 | 1.41 | 1.42 |
| 6436. | 9.99  | .73 | 1.43 | .00 | 1.42 | 1.42 | 1.42 | 1.42 | .00 | 1.42 | 1.42 | 1.43 |
| 6466. | 9.99  | .73 | 1.42 | .00 | 1.43 | 1.42 | 1.43 | 1.42 | .00 | 1.42 | 1.42 | 1.42 |
| 6498. | 9.97  | .73 | 1.44 | .00 | 1.44 | 1.44 | 1.44 | 1.42 | .00 | 1.42 | 1.42 | 1.42 |

481

XERO  
COPY

XERO  
COPY

PACK NO. 67  
G.E. 3 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE 0.90 CURRENT

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

END OF  
DISCHARGE

END OF  
CHARGE

|       |       |     |      |      |      |      |      |      |      |      |
|-------|-------|-----|------|------|------|------|------|------|------|------|
| 3102. | 12.36 | .90 | 1.25 | 1.23 | 1.25 | 1.24 | 1.24 | 1.25 | 1.24 | 1.23 |
| 3131. | 12.33 | .91 | 1.24 | 1.22 | 1.24 | 1.24 | 1.24 | 1.25 | 1.23 | 1.23 |
| 3166. | 12.41 | .91 | 1.25 | 1.25 | 1.26 | 1.25 | 1.25 | 1.24 | 1.25 | 1.25 |
| 3204. | 12.41 | .90 | 1.25 | 1.23 | 1.25 | 1.25 | 1.25 | 1.26 | 1.24 | 1.24 |
| 3223. | 12.36 | .91 | 1.25 | 1.24 | 1.25 | 1.24 | 1.24 | 1.25 | 1.22 | 1.22 |
| 3262. | 12.34 | .91 | 1.24 | 1.23 | 1.24 | 1.24 | 1.24 | 1.25 | 1.22 | 1.23 |
| 3294. | 12.49 | .90 | 1.27 | 1.25 | 1.26 | 1.24 | 1.24 | 1.25 | 1.23 | 1.23 |

|       |       |     |      |      |      |      |      |      |      |      |
|-------|-------|-----|------|------|------|------|------|------|------|------|
| 3102. | 15.29 | .21 | 1.57 | 1.47 | 1.57 | 1.53 | 1.51 | 1.53 | 1.60 | 1.53 |
| 3131. | 13.39 | .09 | 1.60 | 1.47 | 1.61 | 1.55 | 1.53 | 1.50 | 1.61 | 1.55 |
| 3166. | 15.60 | .10 | 1.61 | 1.50 | 1.62 | 1.59 | 1.59 | 1.52 | 1.61 | 1.58 |
| 3204. | 15.51 | .09 | 1.60 | 1.48 | 1.60 | 1.56 | 1.55 | 1.52 | 1.60 | 1.55 |
| 3223. | 15.48 | .08 | 1.61 | 1.48 | 1.61 | 1.56 | 1.56 | 1.51 | 1.59 | 1.54 |
| 3262. | 15.48 | .08 | 1.59 | 1.46 | 1.59 | 1.57 | 1.56 | 1.51 | 1.58 | 1.55 |
| 3294. | 15.55 | .08 | 1.64 | 1.51 | 1.64 | 1.55 | 1.55 | 1.50 | 1.61 | 1.52 |

42

PACK NO. 68  
G.E. 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT  
NO. VOLTAGE 1.50

CELL VOLTAGES

6 7 8 9 10

END OF  
DISCHARGE

|       |       |      |      |      |      |      |      |      |      |      |      |
|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 3107. | 12.11 | 1.50 | 1.21 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 | 1.21 | 1.21 | 1.21 |
| 3142. | 12.08 | 1.48 | 1.21 | 1.21 | 1.22 | 1.21 | 1.22 | 1.22 | 1.20 | 1.20 | 1.21 |
| 3171. | 12.05 | 1.49 | 1.19 | 1.21 | 1.21 | 1.21 | 1.21 | 1.21 | 1.19 | 1.19 | 1.20 |
| 3209. | 12.07 | 1.49 | 1.21 | 1.21 | 1.22 | 1.21 | 1.22 | 1.22 | 1.20 | 1.20 | 1.21 |
| 3235. | 12.04 | 1.49 | 1.20 | 1.21 | 1.21 | 1.21 | 1.21 | 1.21 | 1.19 | 1.19 | 1.20 |
| 3257. | 12.02 | 1.49 | 1.19 | 1.20 | 1.21 | 1.20 | 1.21 | 1.21 | 1.18 | 1.18 | 1.20 |

END OF  
CHARGE

|       |       |     |      |      |      |      |      |      |      |      |      |
|-------|-------|-----|------|------|------|------|------|------|------|------|------|
| 3107. | 15.77 | .34 | 1.64 | 1.58 | 1.63 | 1.62 | 1.61 | 1.51 | 1.55 | 1.44 | 1.49 |
| 3142. | 15.77 | .14 | 1.64 | 1.58 | 1.63 | 1.63 | 1.61 | 1.50 | 1.65 | 1.43 | 1.48 |
| 3171. | 15.32 | .16 | 1.56 | 1.52 | 1.57 | 1.57 | 1.56 | 1.47 | 1.60 | 1.41 | 1.46 |
| 3209. | 15.31 | .15 | 1.61 | 1.49 | 1.57 | 1.56 | 1.56 | 1.47 | 1.61 | 1.40 | 1.46 |
| 3235. | 15.45 | .13 | 1.63 | 1.51 | 1.61 | 1.60 | 1.58 | 1.47 | 1.62 | 1.39 | 1.45 |
| 3267. | 15.42 | .12 | 1.62 | 1.46 | 1.60 | 1.60 | 1.58 | 1.46 | 1.62 | 1.38 | 1.44 |

PACK NO. 19  
G.E. 3 A.H.

|                     |     |
|---------------------|-----|
| DEPTH OF DISCHARGE  | 25  |
| PERCENT OF RECHARGE | 125 |

TEST TEMPERATURE 25 C.  
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | END OF DISCHARGE |
|-----------|--------------|---------|------|------|------|------|------|------|------|------|------|------|------------------|
| 3077.     | 12.15        | 1.51    | 1.22 | 1.23 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 | 1.21 | 1.23 | 1.21 | 1.21             |
| 3106.     | 12.13        | 1.51    | 1.22 | 1.22 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 | 1.21 | 1.23 | 1.21 | 1.21             |
| 3141.     | 12.14        | 1.51    | 1.22 | 1.15 | 1.23 | 1.23 | 1.23 | 1.22 | 1.22 | 1.22 | 1.23 | 1.23 | 1.23             |
| 3179.     | 12.13        | 1.51    | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 | 1.21 | 1.22 | 1.21 | 1.21 | 1.21             |
| 3203.     | 12.13        | 1.50    | 1.22 | 1.23 | 1.23 | 1.23 | 1.23 | 1.22 | 1.21 | 1.22 | 1.21 | 1.20 | 1.20             |
| 3237.     | 12.14        | 1.52    | 1.21 | 1.22 | 1.21 | 1.22 | 1.22 | 1.21 | 1.21 | 1.22 | 1.20 | 1.21 | 1.21             |
| 3269.     | 12.13        | 1.51    | 1.21 | 1.22 | 1.21 | 1.22 | 1.21 | 1.21 | 1.20 | 1.21 | 1.20 | 1.20 | 1.20             |
| 3077.     | 14.93        | .38     | 1.49 | 1.48 | 1.47 | 1.49 | 1.48 | 1.54 | 1.46 | 1.54 | 1.46 | 1.55 | 1.55             |
| 3106.     | 14.93        | .38     | 1.50 | 1.45 | 1.48 | 1.50 | 1.49 | 1.55 | 1.48 | 1.53 | 1.48 | 1.57 | 1.57             |
| 3141.     | 14.91        | .38     | 1.48 | 1.44 | 1.48 | 1.49 | 1.48 | 1.54 | 1.47 | 1.52 | 1.47 | 1.56 | 1.56             |
| 3179.     | 14.77        | .38     | 1.47 | 1.47 | 1.46 | 1.47 | 1.46 | 1.51 | 1.45 | 1.50 | 1.46 | 1.51 | 1.51             |
| 3203.     | 14.98        | .38     | 1.49 | 1.48 | 1.48 | 1.49 | 1.48 | 1.54 | 1.47 | 1.54 | 1.47 | 1.55 | 1.55             |
| 3237.     | 14.99        | .38     | 1.49 | 1.48 | 1.48 | 1.49 | 1.48 | 1.55 | 1.47 | 1.54 | 1.46 | 1.55 | 1.55             |
| 3269.     | 14.93        | .38     | 1.46 | 1.45 | 1.45 | 1.46 | 1.46 | 1.52 | 1.46 | 1.52 | 1.46 | 1.54 | 1.54             |



PACK NO. 20  
G.E. 3 A.H.  
DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 125  
TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES |      |      |      |      |      |      |      |      |      | END OF DISCHARGE |
|-----------|--------------|---------|---------------|------|------|------|------|------|------|------|------|------|------------------|
|           |              |         | 1             | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |                  |
| 2957.     | 11.43        | 2.38    | 1.18          | 1.16 | 1.15 | 1.14 | 1.17 | 1.16 | 1.13 | 1.14 | 1.15 | 1.12 |                  |
| 2986.     | 11.25        | 2.39    | 1.17          | 1.14 | 1.14 | 1.12 | 1.14 | 1.14 | 1.12 | 1.12 | 1.15 | 1.12 |                  |
| 3024.     | 11.36        | 2.39    | 1.18          | 1.15 | 1.14 | 1.13 | 1.15 | 1.14 | 1.13 | 1.13 | 1.16 | 1.13 |                  |
| 3050.     | 11.22        | 2.49    | 1.16          | 1.13 | 1.12 | 1.11 | 1.13 | 1.12 | 1.12 | 1.10 | 1.14 | 1.12 |                  |
| 3082.     | 11.15        | 2.39    | 1.16          | 1.12 | 1.12 | 1.11 | 1.06 | 1.11 | 1.12 | 1.11 | 1.14 | 1.12 |                  |
| 2957.     | 14.85        | .60     | 1.50          | 1.49 | 1.48 | 1.48 | 1.47 | 1.49 | 1.49 | 1.43 | 1.51 | 1.50 | END OF CHARGE    |
| 2986.     | 14.90        | .60     | 1.50          | 1.48 | 1.48 | 1.47 | 1.46 | 1.49 | 1.49 | 1.47 | 1.51 | 1.50 |                  |
| 3024.     | 14.90        | .61     | 1.50          | 1.49 | 1.49 | 1.48 | 1.47 | 1.49 | 1.50 | 1.48 | 1.52 | 1.50 |                  |
| 3050.     | 14.82        | .59     | 1.49          | 1.48 | 1.48 | 1.47 | 1.47 | 1.49 | 1.49 | 1.47 | 1.49 | 1.49 |                  |
| 3083.     | 14.88        | .57     | 1.50          | 1.49 | 1.48 | 1.48 | 1.45 | 1.49 | 1.49 | 1.47 | 1.51 | 1.49 |                  |

PACK NO. 44  
G.E. 3 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT  
VOLTAGE 1.50

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

END OF  
DISCHARGE

END OF  
CHARGE

|       |       |      |      |      |      |     |      |      |      |      |
|-------|-------|------|------|------|------|-----|------|------|------|------|
| 2871. | 10.07 | 1.49 | 1.12 | 1.14 | 1.12 | .00 | 1.14 | 1.13 | 1.12 | 1.10 |
| 2906. | 9.99  | 1.49 | 1.11 | 1.13 | 1.11 | .00 | 1.13 | 1.12 | 1.11 | 1.09 |
| 2935. | 10.00 | 1.49 | 1.10 | 1.12 | 1.11 | .00 | 1.13 | 1.11 | 1.11 | 1.08 |
| 2973. | 10.16 | 1.50 | 1.12 | 1.15 | 1.13 | .00 | 1.15 | 1.13 | 1.14 | 1.11 |
| 2999. | 10.01 | 1.50 | 1.10 | 1.14 | 1.12 | .00 | 1.13 | 1.11 | 1.12 | 1.08 |
| 3031. | 9.95  | 1.50 | 1.09 | 1.13 | 1.10 | .00 | 1.12 | 1.10 | 1.11 | 1.07 |

|       |       |     |      |      |      |     |      |      |      |      |
|-------|-------|-----|------|------|------|-----|------|------|------|------|
| 2871. | 12.90 | .48 | 1.42 | 1.43 | 1.42 | .00 | 1.43 | 1.46 | 1.42 | 1.44 |
| 2906. | 12.93 | .48 | 1.43 | 1.43 | 1.42 | .00 | 1.43 | 1.47 | 1.42 | 1.44 |
| 2935. | 12.91 | .48 | 1.42 | 1.42 | 1.42 | .00 | 1.43 | 1.46 | 1.41 | 1.43 |
| 2973. | 12.96 | .48 | 1.43 | 1.44 | 1.43 | .00 | 1.44 | 1.47 | 1.42 | 1.44 |
| 2999. | 12.96 | .48 | 1.42 | 1.44 | 1.43 | .00 | 1.44 | 1.47 | 1.43 | 1.44 |
| 3031. | 12.94 | .48 | 1.42 | 1.43 | 1.42 | .00 | 1.43 | 1.46 | 1.41 | 1.43 |

PACK NO. 51  
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 1.05

CELL VOLTAGES  
4 3 2 1

6 7 8 9 10

END OF  
DISCHARGE

|       |       |      |      |      |      |      |      |      |      |      |      |
|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 6513. | 12.40 | 1.06 | 1.25 | 1.24 | 1.23 | 1.24 | 1.25 | 1.25 | 1.25 | 1.23 | 1.24 |
| 6556. | 12.41 | 1.06 | 1.25 | 1.23 | 1.23 | 1.23 | 1.25 | 1.25 | 1.26 | 1.23 | 1.24 |
| 6609. | 12.42 | 1.06 | 1.20 | 1.19 | 1.18 | 1.19 | 1.21 | 1.22 | 1.22 | 1.19 | 1.22 |
| 6641. | 12.41 | 1.07 | 1.24 | 1.23 | 1.22 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.23 |
| 6673. | 12.43 | 1.06 | 1.25 | 1.24 | 1.24 | 1.24 | 1.26 | 1.26 | 1.25 | 1.27 | 1.24 |
| 6715. | 12.49 | 1.05 | 1.25 | 1.25 | 1.24 | 1.25 | 1.26 | 1.26 | 1.26 | 1.27 | 1.24 |
| 6737. | 12.43 | 1.07 | 1.25 | 1.24 | 1.24 | 1.24 | 1.25 | 1.25 | 1.25 | 1.26 | 1.23 |
| 6769. | 12.43 | 1.06 | 1.24 | 1.23 | 1.22 | 1.22 | 1.24 | 1.24 | 1.25 | 1.25 | 1.23 |
| 6797. | 12.41 | 1.06 | 1.24 | 1.23 | 1.23 | 1.22 | 1.24 | 1.24 | 1.25 | 1.25 | 1.22 |
| 6832. | 12.38 | 1.06 | 1.24 | 1.24 | 1.23 | 1.23 | 1.24 | 1.25 | 1.25 | 1.23 | 1.21 |
| 6860. | 12.45 | 1.06 | 1.25 | 1.23 | 1.23 | 1.27 | 1.24 | 1.24 | 1.24 | 1.25 | 1.24 |
| 6892. | 12.40 | 1.06 | 1.22 | 1.22 | 1.22 | 1.25 | 1.26 | 1.26 | 1.27 | 1.24 | 1.24 |

END OF  
CHARGE

|       |       |     |      |      |      |      |      |      |      |      |      |
|-------|-------|-----|------|------|------|------|------|------|------|------|------|
| 6513. | 15.53 | .60 | 1.57 | 1.46 | 1.59 | 1.46 | 1.55 | 1.55 | 1.58 | 1.44 | 1.57 |
| 6556. | 15.50 | .53 | 1.57 | 1.46 | 1.59 | 1.46 | 1.56 | 1.55 | 1.58 | 1.43 | 1.57 |
| 6609. | 15.46 | .53 | 1.52 | 1.41 | 1.54 | 1.41 | 1.51 | 1.52 | 1.54 | 1.39 | 1.55 |
| 6641. | 15.54 | .54 | 1.56 | 1.46 | 1.58 | 1.46 | 1.55 | 1.55 | 1.57 | 1.45 | 1.57 |
| 6673. | 15.56 | .54 | 1.56 | 1.46 | 1.59 | 1.46 | 1.56 | 1.56 | 1.58 | 1.48 | 1.57 |
| 6715. | 15.56 | .54 | 1.57 | 1.47 | 1.59 | 1.47 | 1.56 | 1.56 | 1.59 | 1.48 | 1.55 |
| 6737. | 15.58 | .54 | 1.57 | 1.46 | 1.60 | 1.46 | 1.56 | 1.56 | 1.58 | 1.48 | 1.55 |
| 6769. | 15.60 | .53 | 1.56 | 1.46 | 1.59 | 1.46 | 1.56 | 1.56 | 1.59 | 1.46 | 1.60 |
| 6797. | 15.51 | .54 | 1.57 | 1.45 | 1.59 | 1.45 | 1.55 | 1.55 | 1.58 | 1.45 | 1.50 |
| 6832. | 15.46 | .56 | 1.57 | 1.45 | 1.59 | 1.45 | 1.55 | 1.55 | 1.58 | 1.44 | 1.46 |
| 6860. | 15.44 | .47 | 1.55 | 1.47 | 1.57 | 1.47 | 1.54 | 1.54 | 1.58 | 1.44 | 1.51 |
| 6892. | 15.40 | .51 | 1.56 | 1.48 | 1.60 | 1.48 | 1.57 | 1.57 | 1.60 | 1.44 | 1.44 |

PACK NO. 52  
 GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25  
 PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
 ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT  
 VOLTAGE 1.75

CELL VOLTAGES

| 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|------|------|------|------|------|------|------|------|------|------|
| 1.20 | 1.21 | 1.15 | 1.21 | 1.22 | 1.21 | 1.19 | 1.23 | 1.08 | 1.22 |
| 1.19 | 1.20 | 1.20 | 1.21 | 1.22 | 1.21 | 1.19 | 1.23 | 1.24 | 1.22 |
| 1.19 | 1.20 | 1.21 | 1.21 | 1.22 | 1.21 | 1.18 | 1.23 | 1.25 | 1.22 |
| 1.20 | 1.19 | 1.21 | 1.19 | 1.21 | 1.20 | 1.17 | 1.20 | 1.22 | 1.21 |
| 1.21 | 1.20 | 1.21 | 1.20 | 1.21 | 1.20 | 1.18 | 1.21 | 1.23 | 1.21 |
| 1.22 | 1.20 | 1.23 | 1.21 | 1.22 | 1.21 | 1.19 | 1.21 | 1.23 | 1.22 |
| 1.23 | 1.20 | 1.23 | 1.21 | 1.22 | 1.21 | 1.19 | 1.20 | 1.22 | 1.21 |
| 1.22 | 1.21 | 1.23 | 1.20 | 1.21 | 1.21 | 1.19 | 1.20 | 1.22 | 1.21 |
| 1.23 | 1.21 | 1.24 | 1.21 | 1.22 | 1.21 | 1.19 | 1.20 | 1.21 | 1.20 |
| 1.22 | 1.20 | 1.23 | 1.20 | 1.21 | 1.21 | 1.18 | 1.20 | 1.21 | 1.19 |
| 1.22 | 1.20 | 1.23 | 1.20 | 1.21 | 1.20 | 1.21 | 1.23 | 1.21 | 1.18 |

END OF  
 DISCHARGE

|       |       |      |      |      |      |      |      |      |      |
|-------|-------|------|------|------|------|------|------|------|------|
| 6506. | 11.86 | 1.76 | 1.20 | 1.21 | 1.22 | 1.21 | 1.19 | 1.08 | 1.22 |
| 6547. | 12.05 | 1.76 | 1.19 | 1.20 | 1.22 | 1.21 | 1.19 | 1.24 | 1.22 |
| 6573. | 12.07 | 1.76 | 1.19 | 1.20 | 1.22 | 1.21 | 1.18 | 1.25 | 1.22 |
| 6615. | 12.05 | 1.77 | 1.20 | 1.19 | 1.21 | 1.20 | 1.17 | 1.22 | 1.21 |
| 6634. | 12.07 | 1.77 | 1.21 | 1.20 | 1.21 | 1.20 | 1.18 | 1.23 | 1.21 |
| 6664. | 12.09 | 1.77 | 1.22 | 1.21 | 1.22 | 1.21 | 1.19 | 1.23 | 1.22 |
| 6700. | 12.08 | 1.77 | 1.23 | 1.21 | 1.22 | 1.21 | 1.20 | 1.22 | 1.21 |
| 6720. | 12.08 | 1.76 | 1.22 | 1.21 | 1.21 | 1.21 | 1.20 | 1.22 | 1.21 |
| 6762. | 12.05 | 1.77 | 1.23 | 1.21 | 1.22 | 1.21 | 1.20 | 1.21 | 1.20 |
| 6768. | 12.10 | 1.77 | 1.22 | 1.20 | 1.21 | 1.21 | 1.20 | 1.21 | 1.19 |
| 6853. | 12.14 | 1.77 | 1.22 | 1.21 | 1.21 | 1.21 | 1.23 | 1.21 | 1.18 |

END OF  
 CHARGE

5/.

52.

PACK NO. 55  
GOULD 3.5 A.H.  
DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115  
TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES |      |      |      |      |      |      |      |      |      | END OF CHARGE |
|-----------|--------------|---------|---------------|------|------|------|------|------|------|------|------|------|---------------|
|           |              |         | 1             | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |               |
| 3102.     | 12.45        | 1.05    | 1.25          | 1.26 | 1.26 | 1.25 | 1.25 | 1.24 | 1.25 | 1.25 | 1.24 | 1.24 | 5.11          |
| 3131.     | 12.43        | 1.06    | 1.25          | 1.25 | 1.25 | 1.25 | 1.25 | 1.24 | 1.24 | 1.26 | 1.24 | 1.24 | 5.11          |
| 3133.     | 12.42        | 1.05    | 1.23          | 1.15 | 1.26 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.26 | 1.26 | 5.11          |
| 3204.     | 12.37        | 1.06    | 1.25          | 1.25 | 1.25 | 1.24 | 1.25 | 1.24 | 1.24 | 1.26 | 1.25 | 1.25 | 5.11          |
| 3210.     | 12.35        | 1.06    | 1.24          | 1.24 | 1.24 | 1.23 | 1.24 | 1.23 | 1.24 | 1.25 | 1.24 | 1.24 | 5.11          |
| 3252.     | 12.45        | 1.06    | 1.25          | 1.25 | 1.25 | 1.24 | 1.24 | 1.23 | 1.24 | 1.25 | 1.24 | 1.24 | 5.11          |
| 3102.     | 15.36        | .25     | 1.54          | 1.54 | 1.54 | 1.55 | 1.55 | 1.54 | 1.53 | 1.56 | 1.53 | 1.52 | 5.11          |
| 3131.     | 15.37        | .24     | 1.56          | 1.51 | 1.55 | 1.56 | 1.56 | 1.55 | 1.54 | 1.54 | 1.54 | 1.54 | 5.11          |
| 3156.     | 15.33        | .25     | 1.54          | 1.51 | 1.54 | 1.54 | 1.54 | 1.53 | 1.53 | 1.53 | 1.53 | 1.52 | 5.11          |
| 3204.     | 15.40        | .25     | 1.54          | 1.54 | 1.54 | 1.55 | 1.55 | 1.54 | 1.53 | 1.56 | 1.53 | 1.53 | 5.11          |
| 3228.     | 15.38        | .25     | 1.55          | 1.55 | 1.55 | 1.55 | 1.55 | 1.54 | 1.53 | 1.55 | 1.52 | 1.51 | 5.11          |
| 3262.     | 15.36        | .25     | 1.54          | 1.53 | 1.54 | 1.54 | 1.54 | 1.53 | 1.53 | 1.55 | 1.52 | 1.52 | 5.11          |

PACK NO. 56  
GOULD 3.5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT  
VOLTAGE 1.75

CELL VOLTAGES  
1 2 3 4 5

6 7 8 9 10

3091. 12.10 1.77 1.21 1.22 1.22 1.22 1.21 1.20 1.23 1.20 1.21  
3126. 12.09 1.75 1.21 1.22 1.22 1.21 1.21 1.20 1.22 1.20 1.21  
3155. 12.12 1.74 1.20 1.21 1.22 1.21 1.21 1.20 1.22 1.20 1.21  
3193. 12.12 1.79 1.21 1.21 1.22 1.22 1.21 1.21 1.22 1.21 1.21  
3219. 12.07 1.79 1.20 1.21 1.22 1.22 1.21 1.20 1.22 1.20 1.20

END OF  
DISCHARGE

40  
3091. 15.43 .29  
3126. 15.42 .28  
3155. 15.43 .20  
3193. 15.44 .31  
3219. 15.47 .29

END OF  
CHARGE

PACK NO. 7  
GOULD 3.5 A.H.DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125  
TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURSCYCLE PACK CURRENT  
NO. VOLTAGE 1.75

CELL VOLTAGES

|       | 1   | 2   | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|-------|-----|-----|------|------|------|------|------|------|------|------|
| 3040. | .88 | .00 | 1.20 | 1.21 | 1.18 | 1.17 | 1.22 | 1.21 | 1.21 | 1.20 |
| 3064. | .80 | .00 | 1.20 | 1.20 | 1.17 | 1.14 | 1.20 | 1.22 | 1.21 | 1.20 |
| 3098. | .68 | .00 | 1.20 | 1.20 | 1.17 | 1.12 | 1.20 | 1.22 | 1.21 | 1.20 |
| 3130. | .29 | .00 | 1.20 | 1.20 | 1.17 | 1.11 | 1.20 | 1.21 | 1.20 | 1.20 |

END OF  
DISCHARGE

|       |       |     |
|-------|-------|-----|
| 3040. | 13.13 | .44 |
| 3064. | 13.23 | .44 |
| 3098. | 13.19 | .44 |
| 3130. | 13.19 | .44 |

END OF  
CHARGE

|       |      |     |      |      |      |      |      |      |      |      |
|-------|------|-----|------|------|------|------|------|------|------|------|
| 3040. | 1.45 | .00 | 1.47 | 1.46 | 1.46 | 1.42 | 1.48 | 1.47 | 1.46 | 1.46 |
| 3064. | 1.46 | .00 | 1.48 | 1.47 | 1.47 | 1.43 | 1.49 | 1.49 | 1.47 | 1.46 |
| 3098. | 1.45 | .00 | 1.47 | 1.47 | 1.47 | 1.42 | 1.49 | 1.50 | 1.46 | 1.45 |
| 3130. | 1.45 | .00 | 1.47 | 1.46 | 1.46 | 1.42 | 1.49 | 1.49 | 1.46 | 1.46 |

PACK NO. 49  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. 49  
PACK VOLTAGE 1.50  
CURRENT

CELL VOLTAGES

END OF  
DISCHARGE

END OF  
CHARGE

|       | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10  |      |
|-------|------|------|------|------|------|------|------|------|------|-----|------|
| 6224. | 1.22 | 1.22 | 1.22 | 1.22 | 1.21 | 1.22 | 1.23 | 1.24 | 1.25 | .00 | 1.22 |
| 6264. | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 | 1.22 | 1.23 | 1.24 | 1.25 | .00 | 1.23 |
| 6282. | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 | 1.23 | 1.24 | 1.25 | .00 | 1.23 |
| 6324. | 1.22 | 1.22 | 1.20 | 1.21 | 1.21 | 1.22 | 1.23 | 1.24 | 1.25 | .00 | 1.23 |
| 6352. | 1.22 | 1.14 | 1.22 | 1.22 | 1.22 | 1.23 | 1.24 | 1.25 | 1.26 | .00 | 1.24 |
| 6387. | 1.22 | 1.22 | 1.23 | 1.22 | 1.22 | 1.23 | 1.24 | 1.25 | 1.26 | .00 | 1.24 |
| 6414. | 1.22 | 1.22 | 1.23 | 1.21 | 1.21 | 1.22 | 1.23 | 1.25 | 1.26 | .00 | 1.23 |
| 6440. | 1.22 | 1.22 | 1.22 | 1.21 | 1.21 | 1.23 | 1.23 | 1.24 | 1.25 | .00 | 1.23 |
| 6474. | 1.23 | 1.23 | 1.23 | 1.22 | 1.22 | 1.23 | 1.24 | 1.24 | 1.25 | .00 | 1.22 |
| 6512. | 1.22 | 1.22 | 1.20 | 1.21 | 1.21 | 1.22 | 1.23 | 1.24 | 1.25 | .00 | 1.23 |
| 6543. | 1.21 | 1.22 | 1.19 | 1.21 | 1.21 | 1.22 | 1.22 | 1.24 | 1.24 | .00 | 1.22 |
| 6570. | 1.21 | 1.21 | 1.19 | 1.20 | 1.20 | 1.21 | 1.22 | 1.23 | 1.24 | .00 | 1.21 |
| 6605. | 1.21 | 1.21 | 1.20 | 1.20 | 1.21 | 1.21 | 1.21 | 1.23 | 1.24 | .00 | 1.22 |
| 6224. | 1.56 | 1.55 | 1.58 | 1.57 | 1.57 | 1.54 | 1.65 | 1.55 | 1.57 | .00 | 1.53 |
| 6264. | 1.56 | 1.56 | 1.54 | 1.57 | 1.54 | 1.54 | 1.64 | 1.55 | 1.57 | .00 | 1.53 |
| 6282. | 1.57 | 1.56 | 1.54 | 1.57 | 1.54 | 1.54 | 1.65 | 1.56 | 1.58 | .00 | 1.53 |
| 6324. | 1.54 | 1.53 | 1.48 | 1.54 | 1.52 | 1.60 | 1.52 | 1.52 | 1.54 | .00 | 1.51 |
| 6352. | 1.56 | 1.52 | 1.57 | 1.57 | 1.54 | 1.62 | 1.55 | 1.55 | 1.55 | .00 | 1.53 |
| 6387. | 1.56 | 1.55 | 1.57 | 1.57 | 1.54 | 1.63 | 1.55 | 1.55 | 1.57 | .00 | 1.54 |
| 6414. | 1.56 | 1.55 | 1.56 | 1.57 | 1.54 | 1.64 | 1.55 | 1.55 | 1.57 | .00 | 1.53 |
| 6440. | 1.57 | 1.56 | 1.56 | 1.57 | 1.54 | 1.65 | 1.56 | 1.56 | 1.58 | .00 | 1.53 |
| 6474. | 1.55 | 1.55 | 1.54 | 1.56 | 1.54 | 1.63 | 1.55 | 1.55 | 1.57 | .00 | 1.53 |
| 6512. | 1.57 | 1.56 | 1.54 | 1.58 | 1.54 | 1.64 | 1.56 | 1.56 | 1.57 | .00 | 1.54 |
| 6543. | 1.55 | 1.55 | 1.49 | 1.56 | 1.56 | 1.63 | 1.54 | 1.56 | 1.56 | .00 | 1.52 |
| 6570. | 1.55 | 1.55 | 1.50 | 1.56 | 1.56 | 1.64 | 1.55 | 1.55 | 1.56 | .00 | 1.52 |
| 6605. | 1.54 | 1.54 | 1.51 | 1.56 | 1.54 | 1.60 | 1.55 | 1.55 | 1.56 | .00 | 1.52 |

55

XERO  
COPY

XERO  
COPY



PACK NO. 50  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 2.50

CELL VOLTAGES

6 7 8 9 10

END OF  
DISCHARGE

|       |       |      |      |      |      |      |      |      |      |      |      |
|-------|-------|------|------|------|------|------|------|------|------|------|------|
| 6184. | 11.76 | 2.49 | 1.14 | 1.20 | 1.18 | 1.15 | 1.20 | 1.20 | 1.21 | 1.20 | 1.19 |
| 6222. | 11.56 | 2.54 | 1.12 | 1.19 | 1.16 | 1.13 | 1.19 | 1.19 | 1.20 | 1.18 | 1.17 |
| 6242. | 11.69 | 2.50 | 1.13 | 1.20 | 1.17 | 1.14 | 1.20 | 1.20 | 1.21 | 1.19 | 1.18 |
| 6282. | 11.55 | 2.50 | 1.11 | 1.19 | 1.15 | 1.12 | 1.18 | 1.18 | 1.19 | 1.18 | 1.16 |
| 6312. | 11.62 | 2.50 | 1.12 | 1.09 | 1.16 | 1.13 | 1.15 | 1.20 | 1.19 | 1.20 | 1.18 |
| 6345. | 11.60 | 2.50 | 1.11 | 1.19 | 1.16 | 1.13 | 1.14 | 1.19 | 1.20 | 1.19 | 1.17 |
| 6386. | 11.60 | 2.51 | 1.11 | 1.19 | 1.15 | 1.12 | 1.14 | 1.19 | 1.20 | 1.18 | 1.17 |
| 6408. | 11.62 | 2.50 | 1.11 | 1.19 | 1.16 | 1.12 | 1.14 | 1.19 | 1.20 | 1.18 | 1.17 |
| 6436. | 11.68 | 2.50 | 1.10 | 1.18 | 1.16 | 1.13 | 1.15 | 1.20 | 1.21 | 1.20 | 1.18 |
| 6470. | 11.57 | 2.50 | 1.10 | 1.18 | 1.15 | 1.11 | 1.13 | 1.18 | 1.19 | 1.18 | 1.16 |
| 6503. | 11.55 | 2.50 | 1.09 | 1.18 | 1.14 | 1.11 | 1.13 | 1.18 | 1.19 | 1.18 | 1.16 |
| 6536. | 11.55 | 2.50 | 1.10 | 1.13 | 1.16 | 1.12 | 1.14 | 1.19 | 1.19 | 1.19 | 1.17 |
| 6567. | 11.90 | 2.50 | 1.15 | 1.21 | 1.18 | 1.16 | 1.16 | 1.21 | 1.22 | 1.20 | 1.20 |

END OF  
CHARGE

|       |       |      |      |      |      |      |      |      |      |      |      |      |
|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 6184. | 15.79 | 1.44 | 1.59 | 1.52 | 1.60 | 1.58 | 1.60 | 1.58 | 1.51 | 1.60 | 1.52 | 1.70 |
| 6222. | 15.51 | .81  | 1.57 | 1.50 | 1.58 | 1.56 | 1.58 | 1.55 | 1.49 | 1.57 | 1.50 | 1.66 |
| 6242. | 15.49 | .78  | 1.55 | 1.50 | 1.56 | 1.55 | 1.57 | 1.55 | 1.49 | 1.57 | 1.50 | 1.67 |
| 6282. | 15.18 | .84  | 1.56 | 1.48 | 1.55 | 1.54 | 1.55 | 1.51 | 1.46 | 1.53 | 1.46 | 1.58 |
| 6312. | 15.22 | .85  | 1.54 | 1.43 | 1.54 | 1.53 | 1.55 | 1.52 | 1.47 | 1.52 | 1.48 | 1.61 |
| 6345. | 15.29 | .84  | 1.54 | 1.48 | 1.55 | 1.54 | 1.55 | 1.52 | 1.48 | 1.55 | 1.49 | 1.64 |
| 6386. | 15.27 | .84  | 1.55 | 1.48 | 1.54 | 1.53 | 1.55 | 1.52 | 1.47 | 1.54 | 1.48 | 1.63 |
| 6408. | 15.24 | .83  | 1.54 | 1.48 | 1.54 | 1.52 | 1.55 | 1.52 | 1.47 | 1.54 | 1.48 | 1.61 |
| 6436. | 15.49 | .79  | 1.53 | 1.46 | 1.54 | 1.52 | 1.54 | 1.52 | 1.46 | 1.56 | 1.48 | 1.65 |
| 6470. | 15.29 | .83  | 1.54 | 1.47 | 1.54 | 1.53 | 1.55 | 1.51 | 1.47 | 1.54 | 1.48 | 1.63 |
| 6503. | 15.21 | .83  | 1.54 | 1.47 | 1.53 | 1.53 | 1.54 | 1.50 | 1.46 | 1.53 | 1.47 | 1.62 |
| 6536. | 15.22 | .81  | 1.54 | 1.43 | 1.54 | 1.53 | 1.55 | 1.51 | 1.47 | 1.52 | 1.49 | 1.64 |
| 6567. | 15.73 | .69  | 1.54 | 1.51 | 1.59 | 1.56 | 1.58 | 1.60 | 1.52 | 1.65 | 1.53 | 1.70 |

PACK NO. 1  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT  
VOLTAGE 2.50

CELL VOLTAGES  
1 2 3 4 5 6 7 8 9 10

END OF  
DISCHARGE

|       |      |      |     |      |      |     |      |      |      |      |      |      |
|-------|------|------|-----|------|------|-----|------|------|------|------|------|------|
| 6067. | 9.92 | 2.52 | .00 | 1.17 | 1.11 | .00 | 1.03 | 1.01 | 1.16 | 1.13 | 1.16 | 1.16 |
| 6107. | 9.97 | 2.52 | .00 | 1.14 | 1.06 | .00 | .96  | .93  | 1.15 | 1.08 | 1.15 | 1.14 |
| 6125. | 9.91 | 2.51 | .00 | 1.14 | 1.08 | .00 | .98  | .93  | 1.15 | 1.08 | 1.15 | 1.14 |
| 6167. | 9.99 | 2.51 | .00 | 1.14 | 1.12 | .00 | 1.02 | .97  | 1.16 | 1.11 | 1.16 | 1.15 |
| 6230. | 9.96 | 2.51 | .00 | 1.21 | 1.18 | .00 | 1.11 | 1.09 | 1.21 | 1.20 | 1.20 | 1.19 |
| 6257. | 9.97 | 2.50 | .00 | 1.12 | 1.12 | .00 | .99  | .93  | 1.15 | 1.09 | 1.16 | 1.15 |
| 6283. | 9.95 | 2.51 | .00 | 1.12 | 1.12 | .00 | 1.00 | .92  | 1.15 | 1.09 | 1.15 | 1.15 |
| 6317. | 9.94 | 2.50 | .00 | 1.11 | 1.09 | .00 | .98  | .87  | 1.14 | 1.09 | 1.14 | 1.13 |
| 6355. | 9.98 | 2.45 | .00 | 1.17 | 1.14 | .00 | 1.06 | 1.02 | 1.17 | 1.17 | 1.17 | 1.16 |
| 6386. | 9.99 | 2.50 | .00 | 1.16 | 1.13 | .00 | 1.03 | .93  | 1.16 | 1.16 | 1.16 | 1.15 |
| 6413. | 9.94 | 2.50 | .00 | 1.13 | 1.08 | .00 | .99  | .86  | 1.14 | 1.13 | 1.14 | 1.13 |
| 6448. | 9.73 | 2.50 | .00 | 1.14 | 1.09 | .00 | 1.02 | .88  | 1.15 | 1.15 | 1.15 | 1.14 |

END OF  
CHARGE

|       |       |      |     |      |      |     |      |      |      |      |      |      |
|-------|-------|------|-----|------|------|-----|------|------|------|------|------|------|
| 6067. | 11.82 | 1.56 | .00 | 1.46 | 1.47 | .00 | 1.50 | 1.49 | 1.47 | 1.49 | 1.47 | 1.47 |
| 6107. | 11.74 | 1.07 | .00 | 1.45 | 1.46 | .00 | 1.50 | 1.49 | 1.46 | 1.48 | 1.46 | 1.47 |
| 6125. | 11.78 | 1.04 | .00 | 1.46 | 1.46 | .00 | 1.50 | 1.49 | 1.47 | 1.49 | 1.47 | 1.47 |
| 6167. | 11.66 | 1.21 | .00 | 1.44 | 1.45 | .00 | 1.49 | 1.48 | 1.45 | 1.47 | 1.45 | 1.45 |
| 6230. | 11.81 | 1.12 | .00 | 1.46 | 1.47 | .00 | 1.51 | 1.49 | 1.47 | 1.49 | 1.47 | 1.48 |
| 6257. | 11.83 | 1.10 | .00 | 1.46 | 1.47 | .00 | 1.51 | 1.49 | 1.47 | 1.49 | 1.47 | 1.48 |
| 6283. | 11.83 | 1.10 | .00 | 1.46 | 1.47 | .00 | 1.51 | 1.49 | 1.47 | 1.49 | 1.47 | 1.48 |
| 6317. | 11.83 | 1.08 | .00 | 1.46 | 1.47 | .00 | 1.51 | 1.49 | 1.47 | 1.49 | 1.47 | 1.47 |
| 6355. | 11.86 | 1.13 | .00 | 1.45 | 1.47 | .00 | 1.50 | 1.49 | 1.47 | 1.49 | 1.47 | 1.48 |
| 6386. | 11.81 | 1.06 | .00 | 1.45 | 1.46 | .00 | 1.50 | 1.48 | 1.46 | 1.48 | 1.46 | 1.47 |
| 6413. | 11.81 | 1.08 | .00 | 1.45 | 1.46 | .00 | 1.50 | 1.48 | 1.46 | 1.48 | 1.46 | 1.46 |
| 6448. | 11.79 | .97  | .00 | 1.44 | 1.46 | .00 | 1.50 | 1.48 | 1.46 | 1.48 | 1.46 | 1.47 |

PACK NO. 2 SONOTONE 5 A.H. DEPTH OF DISCHARGE 40 TEST TEMPERATURE 25 C PERCENT OF RECHARGE 125 ORBIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES |     |      |      |     | TEST TEMPERATURE 25 C |     |      |      |     | END OF DISCHARGE |
|-----------|--------------|---------|---------------|-----|------|------|-----|-----------------------|-----|------|------|-----|------------------|
|           |              |         | 1             | 2   | 3    | 4    | 5   | 6                     | 7   | 8    | 9    | 10  |                  |
| 5459.     | 5.49         | 4.00    | 1.07          | .00 | 1.12 | 1.12 | .00 | .00                   | .00 | 1.14 | 1.10 | .00 |                  |
| 5497.     | 5.28         | 3.97    | .93           | .00 | 1.09 | 1.10 | .00 | .00                   | .00 | 1.12 | 1.08 | .00 |                  |
| 5525.     | 5.89         | 3.99    | 1.19          | .00 | 1.19 | 1.18 | .00 | .00                   | .00 | 1.19 | 1.19 | .00 |                  |
| 5566.     | 5.78         | 4.02    | 1.16          | .00 | 1.16 | 1.15 | .00 | .00                   | .00 | 1.17 | 1.16 | .00 |                  |
| 5588.     | 5.61         | 4.01    | 1.10          | .00 | 1.14 | 1.12 | .00 | .00                   | .00 | 1.15 | 1.14 | .00 |                  |
| 5616.     | 5.36         | 3.99    | .89           | .00 | 1.12 | 1.10 | .00 | .00                   | .00 | 1.13 | 1.12 | .00 |                  |
| 5650.     | 5.37         | 4.00    | .94           | .00 | 1.11 | 1.10 | .00 | .00                   | .00 | 1.13 | 1.11 | .00 |                  |
| 5683.     | 5.46         | 3.98    | 1.03          | .00 | 1.10 | 1.10 | .00 | .00                   | .00 | 1.13 | 1.12 | .00 |                  |
| 5716.     | 5.45         | 4.02    | 1.04          | .00 | 1.10 | 1.10 | .00 | .00                   | .00 | 1.13 | 1.12 | .00 |                  |
| 5747.     | 5.40         | 4.00    | 1.02          | .00 | 1.06 | 1.09 | .00 | .00                   | .00 | 1.12 | 1.11 | .00 |                  |
| 5459.     | 7.50         | 2.50    | 1.46          | .00 | 1.48 | 1.55 | .00 | .00                   | .00 | 1.52 | 1.53 | .00 | END OF CHARGE    |
| 5497.     | 7.48         | .83     | 1.46          | .00 | 1.47 | 1.54 | .00 | .00                   | .00 | 1.51 | 1.53 | .00 |                  |
| 5525.     | 8.13         | 2.53    | 1.59          | .00 | 1.58 | 1.65 | .00 | .00                   | .00 | 1.64 | 1.71 | .00 |                  |
| 5566.     | 7.48         | 1.22    | 1.47          | .00 | 1.48 | 1.50 | .00 | .00                   | .00 | 1.51 | 1.55 | .00 |                  |
| 5588.     | 7.51         | .84     | 1.45          | .00 | 1.49 | 1.51 | .00 | .00                   | .00 | 1.51 | 1.57 | .00 |                  |
| 5616.     | 7.50         | .77     | 1.42          | .00 | 1.46 | 1.48 | .00 | .00                   | .00 | 1.50 | 1.59 | .00 |                  |
| 5650.     | 7.51         | .80     | 1.45          | .00 | 1.47 | 1.49 | .00 | .00                   | .00 | 1.51 | 1.59 | .00 |                  |
| 5683.     | 7.51         | .79     | 1.45          | .00 | 1.47 | 1.49 | .00 | .00                   | .00 | 1.52 | 1.59 | .00 |                  |
| 5716.     | 7.50         | .80     | 1.46          | .00 | 1.46 | 1.48 | .00 | .00                   | .00 | 1.52 | 1.59 | .00 |                  |
| 5747.     | 7.50         | .79     | 1.45          | .00 | 1.45 | 1.49 | .00 | .00                   | .00 | 1.52 | 1.59 | .00 |                  |

PACK NO. 25  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. 1  
PACK VOLTAGE 1.50  
CURRENT

CELL VOLTAGES

|       | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|-------|------|------|------|------|------|------|------|------|------|------|
| 6010. | 1.14 | 1.16 | 1.16 | 1.12 | 1.03 | 1.15 | 1.18 | 1.19 | 1.14 | 1.16 |
| 6050. | 1.13 | 1.15 | 1.15 | 1.11 | .97  | 1.14 | 1.18 | 1.18 | 1.12 | 1.15 |
| 6088. | 1.19 | 1.15 | 1.14 | 1.10 | .82  | 1.13 | 1.17 | 1.18 | 1.11 | 1.15 |
| 6116. | 1.11 | 1.14 | 1.14 | 1.10 | .75  | 1.12 | 1.17 | 1.18 | 1.11 | 1.14 |
| 6158. | 1.15 | 1.18 | 1.18 | 1.13 | 1.07 | 1.16 | 1.20 | 1.19 | 1.16 | 1.18 |
| 6173. | 1.14 | 1.17 | 1.17 | 1.13 | 1.03 | 1.15 | 1.20 | 1.20 | 1.15 | 1.17 |
| 6191. | 1.15 | 1.17 | 1.17 | 1.15 | 1.02 | 1.16 | 1.21 | 1.21 | 1.16 | 1.20 |
| 6217. | 1.15 | 1.17 | 1.17 | 1.13 | 1.00 | 1.15 | 1.20 | 1.20 | 1.15 | 1.17 |
| 6249. | 1.11 | 1.13 | 1.14 | 1.09 | .89  | 1.13 | 1.18 | 1.19 | 1.14 | 1.16 |
| 6287. | 1.14 | 1.16 | 1.16 | 1.12 | .96  | 1.14 | 1.19 | 1.19 | 1.14 | 1.16 |
| 6318. | 1.13 | 1.16 | 1.15 | 1.11 | .90  | 1.13 | 1.18 | 1.19 | 1.16 | 1.16 |
| 6345. | 1.12 | 1.14 | 1.14 | 1.09 | .77  | 1.11 | 1.17 | 1.17 | 1.12 | 1.14 |
| 6348. | 1.07 | 1.11 | 1.10 | 1.04 | .11  | 1.05 | 1.14 | 1.14 | 1.06 | 1.11 |

END OF  
DISCHARGE

1.20

|       |      |      |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|------|------|
| 6010. | 1.45 | 1.43 | 1.44 | 1.40 | 1.62 | 1.44 | 1.42 | 1.45 | 1.43 | 1.46 |
| 6050. | 1.46 | 1.44 | 1.44 | 1.49 | 1.60 | 1.44 | 1.42 | 1.45 | 1.43 | 1.46 |
| 6088. | 1.45 | 1.44 | 1.44 | 1.48 | 1.59 | 1.45 | 1.42 | 1.45 | 1.43 | 1.48 |
| 6110. | 1.45 | 1.44 | 1.44 | 1.50 | 1.60 | 1.45 | 1.42 | 1.45 | 1.43 | 1.48 |
| 6138. | 1.45 | 1.40 | 1.44 | 1.50 | 1.64 | 1.44 | 1.42 | 1.43 | 1.43 | 1.48 |
| 6173. | 1.45 | 1.44 | 1.44 | 1.51 | 1.63 | 1.45 | 1.43 | 1.46 | 1.43 | 1.46 |
| 6191. | 1.46 | 1.44 | 1.45 | 1.51 | 1.52 | 1.45 | 1.43 | 1.46 | 1.43 | 1.49 |
| 6217. | 1.46 | 1.44 | 1.45 | 1.51 | 1.65 | 1.45 | 1.43 | 1.46 | 1.43 | 1.48 |
| 6249. | 1.46 | 1.44 | 1.45 | 1.51 | 1.64 | 1.45 | 1.42 | 1.45 | 1.43 | 1.48 |
| 6287. | 1.46 | 1.44 | 1.45 | 1.51 | 1.65 | 1.45 | 1.43 | 1.45 | 1.43 | 1.49 |
| 6318. | 1.46 | 1.44 | 1.44 | 1.50 | 1.63 | 1.45 | 1.42 | 1.45 | 1.43 | 1.48 |
| 6345. | 1.45 | 1.43 | 1.43 | 1.49 | 1.61 | 1.43 | 1.41 | 1.44 | 1.42 | 1.46 |
| 6348. | 1.45 | 1.43 | 1.43 | 1.49 | 1.57 | 1.44 | 1.41 | 1.44 | 1.42 | 1.47 |

END OF  
CHARGE

PACK NO. 53  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT  
NO. VOLTAGE 1.50

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

END OF  
DISCHARGE

|       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2951. | 12.35 | 1.51 | 1.22 | 1.23 | 1.24 | 1.25 | 1.25 | 1.24 | 1.25 | 1.24 | 1.24 | 1.25 | 1.25 | 1.25 | 1.22 |
| 2981. | 12.32 | 1.50 | 1.22 | 1.23 | 1.24 | 1.25 | 1.25 | 1.24 | 1.25 | 1.24 | 1.24 | 1.25 | 1.25 | 1.25 | 1.22 |
| 3014. | 12.31 | 1.51 | 1.21 | 1.22 | 1.23 | 1.24 | 1.24 | 1.23 | 1.24 | 1.23 | 1.23 | 1.24 | 1.23 | 1.23 | 1.20 |
| 3048. | 12.25 | 1.50 | 1.22 | 1.24 | 1.25 | 1.25 | 1.25 | 1.24 | 1.25 | 1.24 | 1.25 | 1.26 | 1.25 | 1.25 | 1.21 |
| 3077. | 12.45 | 1.50 | 1.23 | 1.24 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.26 | 1.26 | 1.26 | 1.21 |
| 3112. | 12.28 | 1.50 | 1.21 | 1.22 | 1.23 | 1.24 | 1.24 | 1.23 | 1.23 | 1.23 | 1.23 | 1.24 | 1.23 | 1.23 | 1.19 |
| 3142. | 12.42 | 1.49 | 1.22 | 1.23 | 1.25 | 1.25 | 1.25 | 1.25 | 1.26 | 1.25 | 1.25 | 1.26 | 1.26 | 1.26 | 1.21 |

END OF  
CHARGE

|       |       |     |      |      |      |      |      |      |      |      |      |      |
|-------|-------|-----|------|------|------|------|------|------|------|------|------|------|
| 2951. | 15.72 | .35 | 1.54 | 1.56 | 1.56 | 1.62 | 1.58 | 1.51 | 1.64 | 1.70 | 1.55 | 1.48 |
| 2981. | 15.54 | .22 | 1.54 | 1.54 | 1.54 | 1.61 | 1.56 | 1.50 | 1.60 | 1.69 | 1.54 | 1.48 |
| 3014. | 15.50 | .22 | 1.54 | 1.53 | 1.53 | 1.58 | 1.55 | 1.49 | 1.58 | 1.68 | 1.52 | 1.44 |
| 3048. | 15.45 | .23 | 1.55 | 1.54 | 1.54 | 1.59 | 1.56 | 1.50 | 1.58 | 1.69 | 1.54 | 1.40 |
| 3077. | 15.41 | .23 | 1.55 | 1.54 | 1.54 | 1.58 | 1.55 | 1.50 | 1.57 | 1.68 | 1.53 | 1.38 |
| 3112. | 15.35 | .23 | 1.54 | 1.52 | 1.52 | 1.56 | 1.54 | 1.49 | 1.55 | 1.66 | 1.52 | 1.39 |
| 3142. | 15.31 | .22 | 1.56 | 1.54 | 1.54 | 1.57 | 1.54 | 1.49 | 1.56 | 1.66 | 1.51 | 1.36 |

PACK NO. 54  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. 2980.  
PACK VOLTAGE 2.50

CELL VOLTAGES

| 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
|------|------|------|------|------|------|------|------|------|------|
| 1.19 | 1.17 | 1.04 | 1.17 | 1.21 | 1.19 | 1.19 | 1.20 | 1.20 | 1.20 |
| 1.19 | 1.16 | 1.02 | 1.16 | 1.21 | 1.20 | 1.18 | 1.20 | 1.20 | 1.19 |
| 1.19 | 1.03 | 1.05 | 1.18 | 1.20 | 1.20 | 1.19 | 1.17 | 1.22 | 1.22 |
| 1.19 | 1.17 | 1.04 | 1.17 | 1.21 | 1.20 | 1.19 | 1.21 | 1.20 | 1.20 |
| 1.19 | 1.16 | 1.04 | 1.16 | 1.21 | 1.19 | 1.18 | 1.20 | 1.19 | 1.19 |
| 1.18 | 1.16 | 1.03 | 1.16 | 1.20 | 1.19 | 1.18 | 1.20 | 1.19 | 1.19 |
| 1.16 | 1.13 | .99  | 1.13 | 1.18 | 1.17 | 1.16 | 1.18 | 1.18 | 1.18 |

END OF  
DISCHARGE

2980. 11.71 2.50  
3009. 11.66 2.49  
3044. 11.73 2.49  
3082. 11.75 2.50  
3105. 11.79 2.49  
3140. 11.79 2.51  
3172. 11.65 2.51

END OF  
CHARGE

2980. 15.69 .38  
3009. 15.80 .38  
3044. 15.64 .41  
3082. 15.64 .43  
3105. 15.53 .46  
3140. 15.69 .38  
3172. 15.73 .38

PACK NO. 5  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT  
NO. VOLTAGE 2.50

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

END OF  
DISCHARGE

|       |       |      |      |     |      |      |      |      |      |      |      |      |
|-------|-------|------|------|-----|------|------|------|------|------|------|------|------|
| 3008. | 10.49 | 2.52 | 1.11 | .61 | 1.05 | 1.05 | 1.14 | 1.14 | 1.15 | 1.07 | 1.16 | 1.05 |
| 3039. | 10.33 | 2.51 | 1.09 | .55 | 1.04 | 1.05 | 1.13 | 1.14 | 1.13 | 1.06 | 1.16 | 1.05 |
| 3071. | 10.35 | 2.51 | 1.05 | .55 | 1.02 | 1.05 | 1.12 | 1.14 | 1.11 | 1.07 | 1.15 | 1.04 |
| 3105. | 10.99 | 2.51 | 1.14 | .73 | 1.09 | 1.15 | 1.16 | 1.17 | 1.16 | 1.17 | 1.18 | 1.11 |
| 3134. | 10.09 | 2.50 | 1.07 | .41 | 1.01 | 1.03 | 1.10 | 1.13 | 1.10 | 1.08 | 1.15 | 1.04 |
| 3155. | 10.29 | 2.50 | 1.15 | .00 | 1.06 | 1.15 | 1.15 | 1.15 | 1.16 | 1.17 | 1.16 | 1.14 |

END OF  
CHARGE

|       |       |     |      |      |      |      |      |      |      |      |      |      |
|-------|-------|-----|------|------|------|------|------|------|------|------|------|------|
| 3008. | 14.32 | .62 | 1.43 | 1.45 | 1.44 | 1.44 | 1.43 | 1.43 | 1.43 | 1.45 | 1.42 | 1.42 |
| 3038. | 14.35 | .63 | 1.43 | 1.46 | 1.44 | 1.44 | 1.44 | 1.43 | 1.43 | 1.45 | 1.43 | 1.43 |
| 3071. | 14.26 | .63 | 1.42 | 1.45 | 1.44 | 1.43 | 1.42 | 1.42 | 1.42 | 1.44 | 1.42 | 1.42 |
| 3105. | 14.39 | .62 | 1.44 | 1.46 | 1.45 | 1.44 | 1.44 | 1.44 | 1.44 | 1.46 | 1.43 | 1.43 |
| 3134. | 14.40 | .62 | 1.44 | 1.47 | 1.46 | 1.45 | 1.44 | 1.44 | 1.44 | 1.46 | 1.43 | 1.43 |
| 3155. | 12.96 | .62 | 1.43 | .00  | 1.45 | 1.44 | 1.44 | 1.44 | 1.44 | 1.45 | 1.43 | 1.43 |

PACK NO. 6  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE 4.00 CURRENT

CELL VOLTAGES

1 2 3 4 5 6 7 8 9 10

END OF  
DISCHARGE

|       |      |      |      |      |     |      |      |     |      |     |
|-------|------|------|------|------|-----|------|------|-----|------|-----|
| 2913. | 7.00 | 3.04 | 1.16 | 1.16 | .00 | 1.16 | 1.12 | .00 | 1.10 | .00 |
| 2943. | 7.64 | 4.00 | 1.16 | 1.16 | .00 | 1.16 | 1.11 | .00 | 1.10 | .00 |
| 2986. | 6.87 | 3.96 | 1.13 | 1.11 | .00 | 1.15 | .67  | .00 | .82  | .00 |
| 3009. | 7.70 | 3.98 | 1.15 | 1.14 | .00 | 1.16 | 1.06 | .00 | 1.02 | .00 |
| 3044. | 7.60 | 4.00 | 1.14 | 1.12 | .00 | 1.15 | 1.03 | .00 | .99  | .00 |
| 3076. | 7.62 | 3.99 | 1.13 | 1.12 | .00 | 1.15 | 1.05 | .00 | .99  | .00 |

1.00

END OF  
CHARGE

|       |       |     |      |      |     |      |      |     |      |     |
|-------|-------|-----|------|------|-----|------|------|-----|------|-----|
| 2913. | 10.88 | .98 | 1.48 | 1.48 | .00 | 1.60 | 1.47 | .00 | 1.66 | .00 |
| 2943. | 10.82 | .54 | 1.45 | 1.45 | .00 | 1.52 | 1.44 | .00 | 1.63 | .00 |
| 2986. | 10.43 | .59 | 1.45 | 1.44 | .00 | 1.50 | 1.45 | .00 | 1.60 | .00 |
| 3009. | 10.53 | .55 | 1.46 | 1.45 | .00 | 1.52 | 1.45 | .00 | 1.62 | .00 |
| 3044. | 10.47 | .53 | 1.45 | 1.44 | .00 | 1.51 | 1.45 | .00 | 1.60 | .00 |
| 3076. | 10.43 | .51 | 1.45 | 1.44 | .00 | 1.52 | 1.45 | .00 | 1.61 | .00 |



PACK NO. 29  
SONOTONE 5 A.H.

CYCLE NO. 1  
PACK VOLTAGE 1.50  
CURRENT

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CELL VOLTAGES

|       | 1   | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |                  |
|-------|-----|------|------|------|------|------|------|------|------|------|------------------|
| 2894. | .00 | 1.22 | 1.22 | 1.19 | 1.21 | 1.20 | 1.19 | 1.12 | 1.15 | 1.19 | END OF DISCHARGE |
| 2924. | .00 | 1.21 | 1.21 | 1.19 | 1.20 | 1.19 | 1.18 | 1.10 | 1.14 | 1.18 |                  |
| 2957. | .00 | 1.20 | 1.21 | 1.18 | 1.19 | 1.18 | 1.17 | 1.09 | 1.13 | 1.18 |                  |
| 2966. | .00 | 1.20 | 1.22 | 1.16 | 1.21 | 1.17 | 1.15 | .83  | 1.08 | 1.15 |                  |
| 2995. | .00 | 1.22 | 1.23 | 1.21 | 1.21 | 1.20 | 1.21 | 1.13 | 1.16 | 1.20 |                  |
| 3030. | .00 | 1.21 | 1.22 | 1.20 | 1.21 | 1.19 | 1.20 | 1.11 | 1.15 | 1.19 |                  |
| 3060. | .00 | 1.22 | 1.24 | 1.21 | 1.23 | 1.22 | 1.22 | 1.13 | 1.17 | 1.20 |                  |

|       | 1   | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |               |
|-------|-----|------|------|------|------|------|------|------|------|------|---------------|
| 2894. | .00 | 1.41 | 1.41 | 1.39 | 1.42 | 1.39 | 1.40 | 1.44 | 1.40 | 1.40 | END OF CHARGE |
| 2924. | .00 | 1.41 | 1.41 | 1.39 | 1.43 | 1.40 | 1.41 | 1.45 | 1.41 | 1.40 |               |
| 2957. | .00 | 1.40 | 1.40 | 1.38 | 1.42 | 1.39 | 1.40 | 1.44 | 1.40 | 1.39 |               |
| 2966. | .00 | 1.41 | 1.41 | 1.38 | 1.42 | 1.39 | 1.41 | 1.46 | 1.42 | 1.40 |               |
| 2995. | .00 | 1.40 | 1.41 | 1.39 | 1.42 | 1.39 | 1.40 | 1.44 | 1.40 | 1.40 |               |
| 3030. | .00 | 1.40 | 1.40 | 1.39 | 1.41 | 1.39 | 1.40 | 1.44 | 1.40 | 1.39 |               |
| 3060. | .00 | 1.41 | 1.43 | 1.41 | 1.44 | 1.41 | 1.43 | 1.46 | 1.42 | 1.41 |               |

PACK NO. 30  
SONOTONE 5 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT  
NO. VOLTAGE 2.50

CELL VOLTAGES

10

END OF  
DISCHARGE

|       | 1    | 2    | 3    | 4    | 5    | 6    | 7   | 8    | 9   | 10   |
|-------|------|------|------|------|------|------|-----|------|-----|------|
| 2063. | 1.14 | 1.16 | 1.15 | 1.00 | 1.15 | 1.16 | .00 | 1.13 | .64 | 1.14 |
| 2092. | 1.14 | 1.16 | 1.15 | .98  | 1.15 | 1.16 | .00 | 1.13 | .62 | 1.14 |
| 2927. | 1.15 | 1.07 | 1.16 | 1.08 | 1.15 | 1.17 | .00 | 1.13 | .75 | 1.16 |
| 2965. | 1.15 | 1.17 | 1.16 | 1.04 | 1.16 | 1.18 | .00 | 1.14 | .07 | 1.17 |
| 2998. | 1.14 | 1.16 | 1.16 | 1.16 | 1.15 | 1.16 | .00 | 1.13 | .84 | 1.15 |
| 3030. | 1.13 | 1.15 | 1.14 | 1.08 | 1.13 | 1.16 | .00 | 1.13 | .50 | 1.15 |

END OF  
CHARGE

|       |      |      |      |      |      |      |     |      |      |      |
|-------|------|------|------|------|------|------|-----|------|------|------|
| 2863. | 1.44 | 1.44 | 1.46 | 1.42 | 1.50 | 1.44 | .00 | 1.45 | 1.42 | 1.48 |
| 2892. | 1.44 | 1.45 | 1.46 | 1.43 | 1.50 | 1.44 | .00 | 1.45 | 1.42 | 1.49 |
| 2927. | 1.43 | 1.41 | 1.45 | 1.41 | 1.47 | 1.43 | .00 | 1.44 | 1.41 | 1.49 |
| 2965. | 1.43 | 1.44 | 1.45 | 1.41 | 1.47 | 1.44 | .00 | 1.45 | 1.41 | 1.50 |
| 2998. | 1.43 | 1.44 | 1.46 | 1.43 | 1.49 | 1.44 | .00 | 1.45 | 1.42 | 1.48 |
| 3030. | 1.43 | 1.44 | 1.45 | 1.41 | 1.46 | 1.43 | .00 | 1.44 | 1.41 | 1.49 |

67.

PACK NO. 61  
GULTON 6 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT  
VOLTAGE 1.80

CELL VOLTAGES

|       | 1   | 2    | 3    | 4   | 5   | 6   | 7    | 8    | 9    | 10  |                  |
|-------|-----|------|------|-----|-----|-----|------|------|------|-----|------------------|
| 5654. | .97 | 1.25 | 1.19 | .00 | .00 | .00 | 1.23 | 1.24 | 1.24 | .00 | END OF DISCHARGE |
| 5694. | .95 | 1.24 | 1.18 | .00 | .00 | .00 | 1.23 | 1.24 | 1.24 | .00 |                  |
| 5712. | .93 | 1.24 | 1.18 | .00 | .00 | .00 | 1.23 | 1.24 | 1.24 | .00 |                  |
| 5754. | .95 | 1.24 | 1.18 | .00 | .00 | .00 | 1.23 | 1.24 | 1.24 | .00 |                  |
| 5782. | .94 | 1.15 | 1.18 | .00 | .00 | .00 | 1.23 | 1.22 | 1.25 | .00 |                  |
| 5817. | .94 | 1.24 | 1.18 | .00 | .00 | .00 | 1.23 | 1.24 | 1.24 | .00 |                  |
| 5844. | .94 | 1.24 | 1.17 | .00 | .00 | .00 | 1.23 | 1.24 | 1.24 | .00 |                  |
| 5870. | .93 | 1.24 | 1.18 | .00 | .00 | .00 | 1.23 | 1.24 | 1.24 | .00 |                  |
| 5904. | .92 | 1.24 | 1.18 | .00 | .00 | .00 | 1.23 | 1.23 | 1.23 | .00 |                  |
| 5942. | .93 | 1.23 | 1.16 | .00 | .00 | .00 | 1.23 | 1.23 | 1.23 | .00 |                  |
| 5973. | .92 | 1.23 | 1.16 | .00 | .00 | .00 | 1.22 | 1.23 | 1.23 | .00 |                  |
| 6000. | .89 | 1.22 | 1.15 | .00 | .00 | .00 | 1.21 | 1.23 | 1.22 | .00 |                  |

|       | 1    | 2    | 3    | 4   | 5   | 6   | 7    | 8    | 9    | 10  |               |
|-------|------|------|------|-----|-----|-----|------|------|------|-----|---------------|
| 5654. | 1.69 | 1.58 | 1.58 | .00 | .00 | .00 | 1.53 | 1.54 | 1.56 | .00 | END OF CHARGE |
| 5694. | 1.69 | 1.56 | 1.56 | .00 | .00 | .00 | 1.53 | 1.53 | 1.55 | .00 |               |
| 5712. | 1.69 | 1.56 | 1.56 | .00 | .00 | .00 | 1.53 | 1.54 | 1.55 | .00 |               |
| 5754. | 1.64 | 1.50 | 1.51 | .00 | .00 | .00 | 1.49 | 1.51 | 1.51 | .00 |               |
| 5782. | 1.68 | 1.55 | 1.54 | .00 | .00 | .00 | 1.53 | 1.53 | 1.55 | .00 |               |
| 5817. | 1.68 | 1.55 | 1.55 | .00 | .00 | .00 | 1.54 | 1.54 | 1.55 | .00 |               |
| 5844. | 1.68 | 1.55 | 1.54 | .00 | .00 | .00 | 1.53 | 1.54 | 1.55 | .00 |               |
| 5870. | 1.69 | 1.56 | 1.54 | .00 | .00 | .00 | 1.53 | 1.54 | 1.55 | .00 |               |
| 5904. | 1.69 | 1.55 | 1.54 | .00 | .00 | .00 | 1.53 | 1.54 | 1.55 | .00 |               |
| 5942. | 1.69 | 1.57 | 1.54 | .00 | .00 | .00 | 1.54 | 1.54 | 1.56 | .00 |               |
| 5973. | 1.68 | 1.54 | 1.52 | .00 | .00 | .00 | 1.52 | 1.53 | 1.54 | .00 |               |
| 6000. | 1.68 | 1.55 | 1.52 | .00 | .00 | .00 | 1.52 | 1.53 | 1.54 | .00 |               |

PACK NO. 62  
GULTON 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO.  
PACK VOLTAGE 3.00  
CURRENT

CELL VOLTAGES

| 1    | 2    | 3    | 4   | 5   | 6    | 7    | 8    | 9    | 10  |
|------|------|------|-----|-----|------|------|------|------|-----|
| 1.21 | 1.19 | 1.20 | .00 | .00 | 1.18 | 1.20 | 1.21 | 1.21 | .00 |
| 1.20 | 1.19 | 1.19 | .00 | .00 | 1.17 | 1.19 | 1.20 | 1.20 | .00 |
| 1.21 | 1.19 | 1.19 | .00 | .00 | 1.17 | 1.19 | 1.20 | 1.20 | .00 |
| 1.19 | 1.15 | 1.17 | .00 | .00 | 1.13 | 1.15 | 1.16 | 1.15 | .00 |
| 1.19 | 1.07 | 1.18 | .00 | .00 | 1.16 | 1.17 | 1.16 | 1.16 | .00 |
| 1.19 | 1.14 | 1.17 | .00 | .00 | 1.14 | 1.16 | 1.16 | 1.13 | .00 |
| 1.18 | 1.13 | 1.16 | .00 | .00 | 1.13 | 1.14 | 1.14 | 1.11 | .00 |
| 1.20 | 1.17 | 1.18 | .00 | .00 | 1.16 | 1.17 | 1.18 | 1.17 | .00 |
| 1.16 | 1.14 | 1.16 | .00 | .00 | 1.15 | 1.17 | 1.20 | 1.20 | .00 |
| 1.19 | 1.14 | 1.15 | .00 | .00 | 1.13 | 1.14 | 1.15 | 1.17 | .00 |
| 1.19 | 1.15 | 1.16 | .00 | .00 | 1.14 | 1.14 | 1.15 | 1.17 | .00 |
| 1.19 | 1.08 | 1.16 | .00 | .00 | 1.13 | 1.14 | 1.13 | 1.16 | .00 |

END OF  
DISCHARGE

67.

|       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.72  | 1.86  | 1.83  | 1.73  | 1.02  | 1.99  | 1.01  | 1.00  | .91   | .81   | .88   | .88   | .85   |
| 5812. | 11.03 | 11.07 | 10.83 | 10.47 | 10.51 | 10.55 | 10.73 | 10.78 | 10.86 | 10.79 | 10.75 | 10.77 |

END OF  
CHARGE

|      |      |      |     |     |      |      |      |      |     |
|------|------|------|-----|-----|------|------|------|------|-----|
| 1.57 | 1.64 | 1.57 | .00 | .00 | 1.64 | 1.55 | 1.57 | 1.52 | .00 |
| 1.57 | 1.66 | 1.58 | .00 | .00 | 1.65 | 1.56 | 1.58 | 1.53 | .00 |
| 1.54 | 1.60 | 1.56 | .00 | .00 | 1.59 | 1.53 | 1.54 | 1.51 | .00 |
| 1.51 | 1.50 | 1.52 | .00 | .00 | 1.50 | 1.50 | 1.52 | 1.45 | .00 |
| 1.51 | 1.51 | 1.53 | .00 | .00 | 1.51 | 1.51 | 1.51 | 1.45 | .00 |
| 1.52 | 1.52 | 1.54 | .00 | .00 | 1.52 | 1.52 | 1.53 | 1.46 | .00 |
| 1.54 | 1.54 | 1.58 | .00 | .00 | 1.54 | 1.54 | 1.55 | 1.46 | .00 |
| 1.55 | 1.57 | 1.58 | .00 | .00 | 1.55 | 1.54 | 1.55 | 1.48 | .00 |
| 1.53 | 1.56 | 1.58 | .00 | .00 | 1.55 | 1.49 | 1.50 | 1.43 | .00 |
| 1.55 | 1.56 | 1.57 | .00 | .00 | 1.55 | 1.53 | 1.55 | 1.49 | .00 |
| 1.54 | 1.56 | 1.57 | .00 | .00 | 1.54 | 1.53 | 1.54 | 1.48 | .00 |
| 1.55 | 1.55 | 1.58 | .00 | .00 | 1.55 | 1.54 | 1.53 | 1.49 | .00 |

PACK NO. 37  
GULTON 6 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES |      |     |     |     |      |      |     |      |     | END OF DISCHARGE |
|-----------|--------------|---------|---------------|------|-----|-----|-----|------|------|-----|------|-----|------------------|
|           |              |         | 1             | 2    | 3   | 4   | 5   | 6    | 7    | 8   | 9    | 10  |                  |
| 5011.     | 5.44         | 1.31    | 1.23          | .90  | .00 | .00 | .00 | 1.20 | 1.11 | .00 | 1.23 | .00 |                  |
| 5051.     | 5.43         | 1.80    | 1.21          | .63  | .00 | .00 | .00 | 1.18 | 1.08 | .01 | 1.23 | .00 |                  |
| 5086.     | 5.41         | 1.80    | 1.21          | .80  | .00 | .00 | .00 | 1.20 | 1.02 | .00 | 1.22 | .00 |                  |
| 5113.     | 5.33         | 1.60    | 1.19          | .80  | .00 | .00 | .00 | 1.20 | .98  | .00 | 1.21 | .00 |                  |
| 5129.     | 5.45         | 1.78    | 1.20          | .83  | .00 | .00 | .00 | 1.20 | 1.05 | .00 | 1.21 | .00 |                  |
| 5173.     | 5.32         | 1.78    | 1.18          | .85  | .00 | .00 | .00 | 1.17 | .86  | .01 | 1.20 | .00 |                  |
| 5211.     | 5.35         | 1.78    | 1.20          | .85  | .00 | .00 | .00 | 1.19 | .92  | .00 | 1.20 | .00 |                  |
| 5242.     | 5.29         | 1.78    | 1.19          | .82  | .00 | .00 | .00 | 1.19 | .91  | .00 | 1.20 | .00 |                  |
| 5269.     | 5.29         | 1.79    | 1.18          | .79  | .00 | .00 | .00 | 1.18 | .88  | .01 | 1.18 | .00 |                  |
| 5304.     | 5.52         | 1.78    | 1.21          | .91  | .00 | .00 | .00 | 1.19 | 1.02 | .01 | 1.19 | .00 |                  |
| 5011.     | 7.24         | 1.31    | 1.44          | 1.48 | .00 | .00 | .00 | 1.44 | 1.49 | .00 | 1.43 | .00 | END OF CHARGE    |
| 5051.     | 7.22         | 1.33    | 1.42          | 1.47 | .00 | .00 | .00 | 1.43 | 1.48 | .01 | 1.41 | .00 |                  |
| 5086.     | 7.25         | 1.30    | 1.43          | 1.49 | .00 | .00 | .00 | 1.45 | 1.49 | .01 | 1.42 | .00 |                  |
| 5113.     | 7.26         | 1.30    | 1.43          | 1.50 | .00 | .00 | .00 | 1.45 | 1.49 | .00 | 1.42 | .00 |                  |
| 5129.     | 7.26         | 1.29    | 1.43          | 1.50 | .00 | .00 | .00 | 1.45 | 1.50 | .00 | 1.42 | .00 |                  |
| 5173.     | 7.26         | 1.28    | 1.43          | 1.50 | .00 | .00 | .00 | 1.44 | 1.48 | .00 | 1.42 | .00 |                  |
| 5211.     | 7.27         | 1.33    | 1.43          | 1.50 | .00 | .00 | .00 | 1.45 | 1.48 | .00 | 1.42 | .00 |                  |
| 5242.     | 7.24         | 1.29    | 1.43          | 1.49 | .00 | .00 | .00 | 1.44 | 1.47 | .01 | 1.42 | .00 |                  |
| 5269.     | 7.25         | 1.29    | 1.43          | 1.50 | .00 | .00 | .00 | 1.44 | 1.48 | .01 | 1.41 | .00 |                  |
| 5304.     | 7.27         | 1.42    | 1.43          | 1.50 | .00 | .00 | .00 | 1.46 | 1.49 | .00 | 1.42 | .00 |                  |

PACK NO. 65  
GULTON 6 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT  
VOLTAGE 1.80

CELL VOLTAGES  
1 2 3 4 5

6 7 8 9 10

END OF  
DISCHARGE

|       |       |      |      |      |      |      |      |      |      |      |
|-------|-------|------|------|------|------|------|------|------|------|------|
| 3083. | 12.35 | 1.83 | 1.24 | 1.25 | 1.25 | 1.24 | 1.22 | 1.25 | 1.25 | 1.20 |
| 3112. | 12.24 | 1.82 | 1.24 | 1.25 | 1.23 | 1.22 | 1.21 | 1.24 | 1.24 | 1.19 |
| 3146. | 12.37 | 1.82 | 1.24 | 1.25 | 1.23 | 1.21 | 1.22 | 1.25 | 1.24 | 1.20 |
| 3180. | 12.25 | 1.81 | 1.24 | 1.24 | 1.23 | 1.22 | 1.21 | 1.25 | 1.24 | 1.19 |
| 3209. | 12.39 | 1.83 | 1.25 | 1.26 | 1.27 | 1.27 | 1.22 | 1.25 | 1.24 | 1.19 |
| 3244. | 12.41 | 1.81 | 1.24 | 1.25 | 1.25 | 1.26 | 1.22 | 1.25 | 1.24 | 1.19 |
| 3274. | 12.24 | 1.80 | 1.24 | 1.23 | 1.23 | 1.24 | 1.19 | 1.21 | 1.21 | 1.15 |

END OF  
CHARGE

|       |       |     |      |      |      |      |      |      |      |      |
|-------|-------|-----|------|------|------|------|------|------|------|------|
| 3083. | 15.39 | .41 | 1.58 | 1.53 | 1.52 | 1.46 | 1.60 | 1.51 | 1.49 | 1.59 |
| 3113. | 15.35 | .33 | 1.59 | 1.54 | 1.50 | 1.42 | 1.59 | 1.52 | 1.50 | 1.60 |
| 3146. | 15.21 | .36 | 1.57 | 1.54 | 1.43 | 1.37 | 1.57 | 1.50 | 1.48 | 1.59 |
| 3180. | 15.51 | .40 | 1.63 | 1.59 | 1.42 | 1.39 | 1.62 | 1.53 | 1.51 | 1.63 |
| 3209. | 15.65 | .37 | 1.61 | 1.56 | 1.53 | 1.57 | 1.61 | 1.52 | 1.50 | 1.60 |
| 3244. | 15.40 | .38 | 1.56 | 1.54 | 1.52 | 1.52 | 1.55 | 1.52 | 1.50 | 1.56 |
| 3274. | 15.62 | .39 | 1.61 | 1.58 | 1.54 | 1.54 | 1.63 | 1.54 | 1.52 | 1.62 |

PACK NO. 66  
GULTON 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT  
VOLTAGE 3.00

CELL VOLTAGES

| 1    | 2    | 3   | 4    | 5   | 6   | 7   | 8   | 9    | 10   |
|------|------|-----|------|-----|-----|-----|-----|------|------|
| 1.19 | 1.21 | .00 | 1.12 | .00 | .00 | .00 | .00 | 1.19 | 1.19 |
| 1.19 | 1.20 | .00 | 1.07 | .00 | .00 | .00 | .00 | 1.19 | 1.19 |
| 1.18 | 1.12 | .00 | 1.05 | .00 | .00 | .00 | .00 | 1.20 | 1.20 |
| 1.19 | 1.21 | .00 | 1.05 | .00 | .00 | .00 | .00 | 1.19 | 1.20 |
| 1.18 | 1.20 | .00 | .91  | .00 | .00 | .00 | .00 | 1.17 | 1.19 |
| 1.18 | 1.20 | .00 | .89  | .00 | .00 | .00 | .00 | 1.18 | 1.19 |
| 1.15 | 1.18 | .00 | .79  | .00 | .00 | .00 | .00 | 1.16 | 1.17 |

END OF  
DISCHARGE

|       |      |      |      |      |     |      |     |     |     |     |     |     |      |      |
|-------|------|------|------|------|-----|------|-----|-----|-----|-----|-----|-----|------|------|
| 2802. | 5.86 | 3.04 | 1.19 | 1.21 | .00 | 1.12 | .00 | .00 | .00 | .00 | .00 | .00 | 1.19 | 1.19 |
| 2831. | 5.79 | 3.03 | 1.19 | 1.20 | .00 | 1.07 | .00 | .00 | .00 | .00 | .00 | .00 | 1.19 | 1.19 |
| 2866. | 5.79 | 3.03 | 1.18 | 1.12 | .00 | 1.05 | .00 | .00 | .00 | .00 | .00 | .00 | 1.20 | 1.20 |
| 2904. | 5.80 | 3.04 | 1.19 | 1.21 | .00 | 1.05 | .00 | .00 | .00 | .00 | .00 | .00 | 1.19 | 1.20 |
| 2927. | 5.63 | 3.02 | 1.18 | 1.20 | .00 | .91  | .00 | .00 | .00 | .00 | .00 | .00 | 1.17 | 1.19 |
| 2962. | 5.61 | 3.02 | 1.18 | 1.20 | .00 | .89  | .00 | .00 | .00 | .00 | .00 | .00 | 1.18 | 1.19 |
| 2994. | 5.52 | 3.02 | 1.15 | 1.18 | .00 | .79  | .00 | .00 | .00 | .00 | .00 | .00 | 1.16 | 1.17 |

END OF  
CHARGE

|       |      |     |      |      |     |      |     |     |     |     |     |     |      |      |
|-------|------|-----|------|------|-----|------|-----|-----|-----|-----|-----|-----|------|------|
| 2802. | 7.78 | .69 | 1.58 | 1.58 | .00 | 1.53 | .00 | .00 | .00 | .00 | .00 | .00 | 1.56 | 1.54 |
| 2831. | 7.83 | .52 | 1.60 | 1.60 | .00 | 1.54 | .00 | .00 | .00 | .00 | .00 | .00 | 1.56 | 1.55 |
| 2866. | 7.77 | .53 | 1.58 | 1.58 | .00 | 1.52 | .00 | .00 | .00 | .00 | .00 | .00 | 1.55 | 1.54 |
| 2904. | 7.82 | .53 | 1.61 | 1.59 | .00 | 1.53 | .00 | .00 | .00 | .00 | .00 | .00 | 1.53 | 1.55 |
| 2927. | 7.46 | .66 | 1.53 | 1.55 | .00 | 1.51 | .00 | .00 | .00 | .00 | .00 | .00 | 1.45 | 1.46 |
| 2962. | 7.76 | .55 | 1.59 | 1.60 | .00 | 1.53 | .00 | .00 | .00 | .00 | .00 | .00 | 1.50 | 1.53 |
| 2994. | 7.76 | .52 | 1.62 | 1.63 | .00 | 1.54 | .00 | .00 | .00 | .00 | .00 | .00 | 1.49 | 1.49 |

PACK NO. 42  
GULTON 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT |
|-----------|--------------|---------|
| 2659.     | 6.53         | 3.03    |
| 2688.     | 6.40         | 3.03    |
| 2723.     | 6.34         | 3.02    |
| 2746.     | 6.82         | 3.03    |
| 2769.     | 6.58         | 3.03    |
| 2804.     | 6.51         | 3.03    |

| CELL VOLTAGES |      |      |      |      |      |
|---------------|------|------|------|------|------|
| 1             | 2    | 3    | 4    | 5    | 6    |
| .00           | 1.14 | 1.15 | .99  | 1.05 | 1.16 |
| .00           | 1.13 | 1.14 | 1.00 | 1.02 | 1.15 |
| .00           | 1.04 | 1.14 | .97  | .98  | 1.14 |
| .00           | 1.17 | 1.16 | 1.07 | 1.18 | 1.17 |
| .00           | 1.13 | 1.14 | 1.01 | 1.11 | 1.14 |
| .00           | 1.14 | 1.14 | 1.01 | 1.08 | 1.12 |

END OF  
DISCHARGE

| 7   | 8   | 9   | 10  |
|-----|-----|-----|-----|
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |

|       |      |     |
|-------|------|-----|
| 2659. | 8.81 | .86 |
| 2688. | 8.89 | .65 |
| 2722. | 8.58 | .62 |
| 2746. | 8.90 | .61 |
| 2769. | 8.83 | .74 |
| 2804. | 8.89 | .68 |

END OF  
CHARGE

| 7   | 8   | 9   | 10  |
|-----|-----|-----|-----|
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |
| .00 | .00 | .00 | .00 |

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1.54 | 1.58 | 1.42 | 1.45 | 1.43 | 1.58 |
|------|------|------|------|------|------|

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1.43 | 1.44 | 1.42 | 1.47 | 1.44 | 1.43 |
| 1.52 | 1.55 | 1.45 | 1.47 | 1.44 | 1.43 |
| 1.46 | 1.45 | 1.45 | 1.46 | 1.49 | 1.43 |
| 1.48 | 1.50 | 1.42 | 1.54 | 1.50 | 1.43 |
| 1.43 | 1.44 | 1.42 | 1.46 | 1.43 | 1.43 |
| 1.54 | 1.58 | 1.42 | 1.57 | 1.55 | 1.58 |

|      |      |      |      |      |      |
|------|------|------|------|------|------|
| 1.43 | 1.44 | 1.42 | 1.47 | 1.44 | 1.43 |
| 1.52 | 1.55 | 1.45 | 1.47 | 1.44 | 1.43 |
| 1.46 | 1.45 | 1.45 | 1.46 | 1.49 | 1.43 |
| 1.48 | 1.50 | 1.42 | 1.54 | 1.50 | 1.43 |
| 1.43 | 1.44 | 1.42 | 1.46 | 1.43 | 1.43 |
| 1.54 | 1.58 | 1.42 | 1.57 | 1.55 | 1.58 |



PACK NO. 110  
G.E. 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115  
TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK VOLTAGE 3.60 CURRENT

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 5854. | 6.27 | 3.57 | 1.26 | 1.25 | 1.25 | 1.26 | 1.25 | 1.25 |
| 5894. | 6.36 | 3.60 | 1.29 | 1.27 | 1.29 | 1.28 | 1.28 | 1.28 |
| 5952. | 6.26 | 3.60 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 |
| 5980. | 6.30 | 3.61 | 1.27 | 1.26 | 1.21 | 1.27 | 1.27 | 1.27 |
| 6029. | 6.26 | 3.61 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 |
| 6055. | 6.24 | 3.59 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 |
| 6089. | 6.24 | 3.58 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 6127. | 6.23 | 3.58 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 6158. | 6.22 | 3.59 | 1.25 | 1.24 | 1.25 | 1.25 | 1.25 | 1.25 |
| 6185. | 6.19 | 3.60 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| 6720. | 6.23 | 3.58 | 1.24 | 1.25 | 1.25 | 1.26 | 1.26 | 1.26 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 5854. | 7.55 | 2.07 | 1.52 | 1.52 | 1.51 | 1.51 | 1.51 | 1.51 |
| 5894. | 7.23 | 2.11 | 1.45 | 1.46 | 1.44 | 1.44 | 1.44 | 1.45 |
| 5952. | 7.63 | 1.74 | 1.55 | 1.53 | 1.52 | 1.53 | 1.53 | 1.52 |
| 5980. | 7.79 | 1.24 | 1.57 | 1.57 | 1.54 | 1.54 | 1.54 | 1.54 |
| 6029. | 7.81 | 1.99 | 1.57 | 1.60 | 1.55 | 1.55 | 1.55 | 1.55 |
| 6055. | 7.73 | 1.69 | 1.55 | 1.56 | 1.54 | 1.54 | 1.54 | 1.54 |
| 6089. | 7.81 | 1.17 | 1.58 | 1.59 | 1.55 | 1.55 | 1.55 | 1.54 |
| 6127. | 7.78 | 1.59 | 1.57 | 1.57 | 1.54 | 1.55 | 1.55 | 1.54 |
| 6158. | 7.80 | 1.15 | 1.58 | 1.58 | 1.54 | 1.55 | 1.55 | 1.54 |
| 6185. | 7.81 | 1.15 | 1.58 | 1.58 | 1.54 | 1.55 | 1.55 | 1.54 |
| 6720. | 7.82 | 1.17 | 1.58 | 1.59 | 1.55 | 1.56 | 1.56 | 1.55 |

PACK NO. 124  
G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK VOLTAGE 6.00 CURRENT

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 5669. | 6.03 | 5.97 | 1.23 | 1.23 | 1.17 | 1.23 | 1.22 |
| 5709. | 6.06 | 5.97 | 1.25 | 1.25 | 1.14 | 1.25 | 1.25 |
| 5734. | 6.12 | 5.97 | 1.24 | 1.17 | 1.19 | 1.24 | 1.25 |
| 5769. | 6.04 | 6.02 | 1.23 | 1.17 | 1.17 | 1.23 | 1.23 |
| 5796. | 6.02 | 6.02 | 1.22 | 1.16 | 1.16 | 1.23 | 1.23 |
| 5822. | 6.01 | 6.01 | 1.22 | 1.16 | 1.16 | 1.22 | 1.23 |
| 5856. | 5.99 | 6.03 | 1.22 | 1.16 | 1.16 | 1.22 | 1.22 |
| 5884. | 5.96 | 6.03 | 1.21 | 1.15 | 1.15 | 1.21 | 1.21 |
| 5925. | 5.99 | 6.03 | 1.21 | 1.15 | 1.15 | 1.21 | 1.21 |
| 5952. | 5.96 | 6.02 | 1.20 | 1.14 | 1.14 | 1.21 | 1.21 |
| 5987. | 5.94 | 6.04 | 1.21 | 1.13 | 1.13 | 1.19 | 1.18 |
| 5669. | 7.62 | 3.45 | 1.52 | 1.52 | 1.56 | 1.52 | 1.52 |
| 5709. | 7.43 | 2.94 | 1.48 | 1.47 | 1.56 | 1.47 | 1.48 |
| 5734. | 7.84 | 1.23 | 1.57 | 1.54 | 1.56 | 1.53 | 1.60 |
| 5769. | 7.82 | 1.30 | 1.56 | 1.54 | 1.64 | 1.53 | 1.57 |
| 5796. | 7.80 | 1.28 | 1.56 | 1.53 | 1.63 | 1.52 | 1.58 |
| 5822. | 7.80 | 1.37 | 1.56 | 1.53 | 1.65 | 1.53 | 1.59 |
| 5856. | 7.81 | 1.33 | 1.56 | 1.53 | 1.66 | 1.53 | 1.59 |
| 5894. | 7.75 | 2.35 | 1.55 | 1.52 | 1.60 | 1.52 | 1.56 |
| 5925. | 7.82 | 1.50 | 1.55 | 1.52 | 1.65 | 1.52 | 1.58 |
| 5952. | 7.81 | 1.34 | 1.56 | 1.52 | 1.65 | 1.51 | 1.58 |
| 5987. | 7.83 | 1.33 | 1.54 | 1.51 | 1.64 | 1.51 | 1.58 |

PACK NO. 82  
G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. 6038.  
PACK VOLTAGE 6.00

CURRENT 5.97  
CELL VOLTAGES 1 2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 6038. | 6.19 | 5.97 | 1.25 | 1.24 | 1.25 | 1.25 | 1.25 | 1.25 |
| 6065. | 6.10 | 5.98 | 1.23 | 1.22 | 1.23 | 1.24 | 1.23 | 1.23 |
| 6091. | 6.05 | 5.99 | 1.22 | 1.21 | 1.22 | 1.23 | 1.21 | 1.21 |
| 6125. | 6.00 | 5.95 | 1.20 | 1.21 | 1.21 | 1.22 | 1.20 | 1.20 |
| 6163. | 5.96 | 5.96 | 1.18 | 1.20 | 1.19 | 1.21 | 1.19 | 1.19 |
| 6194. | 5.94 | 5.98 | 1.18 | 1.19 | 1.19 | 1.21 | 1.18 | 1.18 |
| 6221. | 5.88 | 5.99 | 1.16 | 1.19 | 1.17 | 1.20 | 1.17 | 1.17 |
| 6256. | 5.92 | 5.97 | 1.18 | 1.19 | 1.18 | 1.21 | 1.18 | 1.18 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 6038. | 7.36 | 3.75 | 1.48 | 1.46 | 1.49 | 1.50 | 1.47 | 1.47 |
| 6065. | 7.40 | 3.60 | 1.48 | 1.48 | 1.49 | 1.50 | 1.49 | 1.49 |
| 6091. | 7.37 | 3.58 | 1.46 | 1.48 | 1.48 | 1.49 | 1.48 | 1.48 |
| 6125. | 7.31 | 3.55 | 1.45 | 1.48 | 1.46 | 1.48 | 1.45 | 1.45 |
| 6163. | 7.23 | 3.63 | 1.44 | 1.46 | 1.44 | 1.46 | 1.44 | 1.44 |
| 6194. | 7.29 | 3.78 | 1.45 | 1.48 | 1.45 | 1.47 | 1.45 | 1.45 |
| 6221. | 7.27 | 3.68 | 1.44 | 1.48 | 1.45 | 1.47 | 1.44 | 1.44 |
| 6256. | 7.31 | 3.74 | 1.45 | 1.48 | 1.45 | 1.47 | 1.44 | 1.44 |
|       |      | 3.66 | 1.45 | 1.48 | 1.45 | 1.47 | 1.44 | 1.44 |

PACK NO. 85  
G.E. 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. 3.60  
PACK VOLTAGE 3.60  
CURRENT

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 5749. | 5.91 | 3.58 | 1.20 | 1.19 | 1.18 | 1.19 | 1.19 | 1.19 |
| 5792. | 5.89 | 3.58 | 1.21 | 1.19 | 1.18 | 1.18 | 1.18 | 1.18 |
| 5845. | 5.94 | 3.60 | 1.19 | 1.18 | 1.17 | 1.17 | 1.17 | 1.17 |
| 5877. | 5.88 | 3.61 | 1.19 | 1.18 | 1.17 | 1.17 | 1.17 | 1.18 |
| 5900. | 5.93 | 3.60 | 1.23 | 1.22 | 1.21 | 1.21 | 1.21 | 1.21 |
| 5922. | 5.94 | 3.58 | 1.21 | 1.20 | 1.20 | 1.19 | 1.19 | 1.20 |
| 5954. | 5.93 | 3.60 | 1.20 | 1.20 | 1.19 | 1.19 | 1.19 | 1.20 |
| 5982. | 5.92 | 3.60 | 1.20 | 1.19 | 1.18 | 1.18 | 1.18 | 1.18 |
| 6017. | 5.92 | 3.60 | 1.20 | 1.19 | 1.17 | 1.18 | 1.18 | 1.18 |
| 6049. | 5.89 | 3.59 | 1.19 | 1.18 | 1.17 | 1.18 | 1.18 | 1.18 |
| 6081. | 5.89 | 3.58 | 1.18 | 1.17 | 1.16 | 1.17 | 1.17 | 1.18 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 5749. | 7.19 | 2.88 | 1.44 | 1.45 | 1.46 | 1.44 | 1.43 | 1.43 |
| 5792. | 7.19 | 2.43 | 1.45 | 1.45 | 1.46 | 1.44 | 1.43 | 1.43 |
| 5845. | 7.20 | 2.50 | 1.43 | 1.44 | 1.45 | 1.44 | 1.43 | 1.43 |
| 5877. | 7.19 | 2.52 | 1.44 | 1.44 | 1.46 | 1.44 | 1.43 | 1.43 |
| 5900. | 7.17 | 2.71 | 1.44 | 1.45 | 1.45 | 1.44 | 1.43 | 1.43 |
| 5922. | 7.18 | 2.60 | 1.44 | 1.45 | 1.46 | 1.44 | 1.43 | 1.43 |
| 5954. | 7.18 | 2.59 | 1.44 | 1.45 | 1.47 | 1.45 | 1.44 | 1.44 |
| 5982. | 7.18 | 2.57 | 1.43 | 1.44 | 1.45 | 1.44 | 1.42 | 1.42 |
| 6017. | 7.14 | 2.17 | 1.43 | 1.43 | 1.44 | 1.43 | 1.42 | 1.42 |
| 6049. | 7.18 | 2.26 | 1.43 | 1.44 | 1.45 | 1.44 | 1.43 | 1.43 |
| 6081. | 7.12 | 2.25 | 1.43 | 1.43 | 1.44 | 1.42 | 1.40 | 1.40 |

PACK NO. 111  
G.E. 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES |      |      |      |      | END OF DISCHARGE |
|-----------|--------------|---------|---------------|------|------|------|------|------------------|
|           |              |         | 1             | 2    | 3    | 4    | 5    |                  |
| 2946.     | 6.21         | 3.66    | 1.25          | 1.26 | 1.24 | 1.25 | 1.25 |                  |
| 2975.     | 6.20         | 3.67    | 1.23          | 1.24 | 1.23 | 1.25 | 1.24 |                  |
| 3041.     | 6.26         | 3.66    | 1.26          | 1.26 | 1.25 | 1.26 | 1.25 |                  |
| 3064.     | 6.46         | 3.54    | 1.30          | 1.30 | 1.29 | 1.29 | 1.29 |                  |
| 3099.     | 6.19         | 3.63    | 1.24          | 1.25 | 1.23 | 1.24 | 1.24 |                  |
| 3131.     | 6.19         | 3.66    | 1.23          | 1.24 | 1.23 | 1.24 | 1.24 |                  |
| 2946.     | 7.96         | .83     | 1.64          | 1.56 | 1.66 | 1.55 | 1.60 | END OF CHARGE    |
| 2975.     | 7.99         | .71     | 1.65          | 1.57 | 1.65 | 1.56 | 1.60 |                  |
| 3041.     | 7.87         | .65     | 1.60          | 1.54 | 1.64 | 1.54 | 1.56 |                  |
| 3064.     | 7.34         | .85     | 1.46          | 1.48 | 1.47 | 1.48 | 1.47 |                  |
| 3099.     | 7.75         | .48     | 1.62          | 1.52 | 1.57 | 1.51 | 1.55 |                  |
| 3131.     | 7.74         | .48     | 1.61          | 1.50 | 1.57 | 1.49 | 1.53 |                  |

PACK NO. 125  
G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES |      |      |      |      |
|-----------|--------------|---------|---------------|------|------|------|------|
|           |              |         | 1             | 2    | 3    | 4    | 5    |
| 2945.     | 6.04         | 6.04    | 1.22          | 1.22 | 1.22 | 1.22 | 1.22 |
| 2974.     | 6.01         | 6.04    | 1.21          | 1.22 | 1.22 | 1.22 | 1.22 |
| 3015.     | 6.04         | 6.00    | 1.21          | 1.21 | 1.21 | 1.21 | 1.22 |
| 3073.     | 6.01         | 5.94    | 1.20          | 1.21 | 1.21 | 1.21 | 1.21 |
| 3105.     | 6.00         | 5.95    | 1.18          | 1.19 | 1.18 | 1.18 | 1.19 |
| 2945.     | 8.00         | 1.38    | 1.64          | 1.62 | 1.62 | 1.57 | 1.58 |
| 2974.     | 8.07         | 1.31    | 1.66          | 1.64 | 1.64 | 1.58 | 1.59 |
| 3015.     | 7.04         | 1.78    | 1.61          | 1.58 | 1.60 | 1.54 | 1.53 |
| 3073.     | 7.81         | .66     | 1.60          | 1.57 | 1.59 | 1.53 | 1.52 |
| 3105.     | 7.78         | .60     | 1.60          | 1.57 | 1.60 | 1.53 | 1.51 |

END OF  
DISCHARGE

END OF  
CHARGE

PACK NO. 83  
G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE 6.00 CURRENT

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2987. | 5.72 | 6.05 | 1.16 | 1.15 | 1.14 | 1.14 | 1.14 |
| 3016. | 5.71 | 6.04 | 1.15 | 1.14 | 1.14 | 1.14 | 1.13 |
| 3051. | 5.74 | 6.04 | 1.16 | 1.16 | 1.16 | 1.15 | 1.15 |
| 3089. | 5.67 | 6.06 | 1.15 | 1.13 | 1.14 | 1.12 | 1.12 |
| 3112. | 5.66 | 6.08 | 1.15 | 1.15 | 1.14 | 1.11 | 1.11 |
| 3147. | 5.67 | 6.02 | 1.15 | 1.13 | 1.13 | 1.09 | 1.09 |
| 3179. | 5.64 | 6.03 | 1.15 | 1.13 | 1.13 | 1.08 | 1.08 |

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2987. | 7.15 | 1.50 | 1.44 | 1.44 | 1.44 | 1.43 | 1.43 |
| 3016. | 7.16 | 1.54 | 1.45 | 1.45 | 1.44 | 1.43 | 1.43 |
| 3051. | 7.15 | 1.53 | 1.44 | 1.44 | 1.43 | 1.43 | 1.43 |
| 3089. | 7.16 | 1.52 | 1.44 | 1.43 | 1.43 | 1.42 | 1.42 |
| 3112. | 7.15 | 1.53 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| 3147. | 7.17 | 1.51 | 1.43 | 1.43 | 1.42 | 1.42 | 1.42 |
| 3179. | 7.16 | 1.53 | 1.44 | 1.43 | 1.42 | 1.42 | 1.42 |

PACK NO. 97  
G.E. 12 A.H.

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE CURRENT

1 2 3 4 5

CELL VOLTAGES

END OF  
DISCHARGE

END OF  
CHARGE

2977. 5.61 9.58 1.13 1.14 1.13 1.13 1.13  
3006. 5.59 9.59 1.13 1.13 1.13 1.13 1.13  
3041. 5.68 9.63 1.14 1.14 1.11 1.14 1.15  
3079. 5.62 9.57 1.13 1.13 1.14 1.13 1.13  
3102. 5.64 9.58 1.14 1.14 1.14 1.13 1.13  
3137. 5.56 9.46 1.12 1.12 1.13 1.11 1.12  
3169. 5.58 9.59 1.11 1.11 1.12 1.11 1.12

2.40  
2977. 7.44 2.26 1.49 1.52 1.47 1.50 1.49  
3006. 7.50 2.22 1.50 1.53 1.48 1.52 1.50  
3041. 7.52 2.18 1.49 1.53 1.48 1.51 1.50  
3079. 7.47 2.25 1.49 1.52 1.48 1.51 1.50  
3102. 7.33 2.43 1.45 1.47 1.45 1.47 1.47  
3137. 7.53 2.11 1.49 1.54 1.49 1.52 1.50  
3169. 7.51 2.10 1.50 1.54 1.50 1.52 1.50



PACK NO. 86  
G.E. 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT  
VOLTAGE 3.60

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|
| 2903. | 5.77 | 3.56 | 1.18 | 1.15 | 1.17 | 1.16 |
| 2932. | 5.74 | 3.60 | 1.18 | 1.15 | 1.17 | 1.15 |
| 2989. | 5.81 | 3.65 | 1.20 | 1.14 | 1.19 | 1.16 |
| 3013. | 5.75 | 3.58 | 1.18 | 1.16 | 1.18 | 1.16 |
| 3047. | 5.79 | 3.60 | 1.18 | 1.16 | 1.18 | 1.16 |
| 3079. | 5.76 | 3.62 | 1.17 | 1.15 | 1.16 | 1.15 |
| 2903. | 7.01 | 1.15 | 1.41 | 1.41 | 1.41 | 1.41 |
| 2932. | 7.02 | 1.16 | 1.42 | 1.41 | 1.41 | 1.41 |
| 2989. | 7.00 | 1.17 | 1.41 | 1.40 | 1.41 | 1.41 |
| 3013. | 7.00 | 1.17 | 1.41 | 1.41 | 1.41 | 1.41 |
| 3047. | 7.00 | 1.17 | 1.41 | 1.41 | 1.41 | 1.41 |
| 3079. | 7.00 | 1.17 | 1.40 | 1.40 | 1.40 | 1.41 |

PACK NO. 100  
G.E. 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES |      |      |      |      |
|-----------|--------------|---------|---------------|------|------|------|------|
|           |              |         | 1             | 2    | 3    | 4    | 5    |
| 2770.     | 5.58         | 5.94    | 1.15          | 1.14 | 1.14 | 1.09 | 1.10 |
| 2799.     | 5.54         | 5.89    | 1.14          | 1.14 | 1.14 | 1.08 | 1.09 |
| 2834.     | 5.45         | 5.93    | 1.15          | 1.08 | 1.15 | 1.09 | 1.11 |
| 2872.     | 5.59         | 5.91    | 1.15          | 1.14 | 1.14 | 1.09 | 1.10 |
| 2896.     | 5.52         | 5.92    | 1.15          | 1.14 | 1.13 | 1.08 | 1.08 |
| 2930.     | 5.61         | 5.88    | 1.15          | 1.15 | 1.14 | 1.09 | 1.10 |
| 2962.     | 5.57         | 5.96    | 1.15          | 1.14 | 1.14 | 1.09 | 1.10 |

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2770. | 7.21 | 1.92 | 1.46 | 1.46 | 1.46 | 1.43 | 1.44 |
| 2799. | 7.23 | 1.93 | 1.46 | 1.46 | 1.46 | 1.43 | 1.43 |
| 2834. | 7.20 | 1.93 | 1.45 | 1.45 | 1.45 | 1.42 | 1.43 |
| 2872. | 7.25 | 1.96 | 1.46 | 1.46 | 1.46 | 1.43 | 1.44 |
| 2896. | 7.23 | 1.95 | 1.47 | 1.47 | 1.46 | 1.43 | 1.43 |
| 2930. | 7.23 | 1.95 | 1.46 | 1.46 | 1.46 | 1.42 | 1.43 |
| 2962. | 7.23 | 1.94 | 1.46 | 1.46 | 1.46 | 1.43 | 1.43 |

END OF  
CHARGE

PACK NO. 84  
GOULD 20 A.H.

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

CYCLE NO. 5839.  
PACK VOLTAGE 6.25  
CURRENT 6.00

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 5839. | 6.25 | 6.00 | 1.27 | 1.27 | 1.24 | 1.25 | 1.26 |
| 5885. | 6.31 | 6.07 | 1.28 | 1.28 | 1.27 | 1.26 | 1.27 |
| 5915. | 6.25 | 6.06 | 1.27 | 1.15 | 1.26 | 1.25 | 1.25 |
| 5948. | 6.23 | 6.06 | 1.27 | 1.27 | 1.25 | 1.25 | 1.25 |
| 5989. | 6.24 | 6.13 | 1.26 | 1.26 | 1.24 | 1.24 | 1.24 |
| 6011. | 6.25 | 6.06 | 1.27 | 1.26 | 1.26 | 1.25 | 1.25 |
| 6039. | 6.27 | 6.06 | 1.25 | 1.25 | 1.24 | 1.23 | 1.24 |
| 6073. | 6.17 | 6.00 | 1.25 | 1.24 | 1.23 | 1.22 | 1.23 |
| 6106. | 6.31 | 5.99 | 1.27 | 1.27 | 1.26 | 1.25 | 1.26 |
| 6139. | 6.28 | 6.02 | 1.27 | 1.20 | 1.27 | 1.26 | 1.27 |
| 6170. | 6.26 | 6.03 | 1.26 | 1.26 | 1.25 | 1.24 | 1.25 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 5839. | 7.87 | 3.45 | 1.56 | 1.58 | 1.59 | 1.56 | 1.58 |
| 5885. | 8.09 | 2.65 | 1.65 | 1.60 | 1.63 | 1.57 | 1.60 |
| 5915. | 7.75 | 2.59 | 1.54 | 1.55 | 1.55 | 1.52 | 1.54 |
| 5948. | 7.73 | 2.51 | 1.55 | 1.57 | 1.57 | 1.54 | 1.55 |
| 5989. | 7.76 | 2.45 | 1.54 | 1.56 | 1.56 | 1.53 | 1.55 |
| 6011. | 7.79 | 2.40 | 1.55 | 1.57 | 1.57 | 1.53 | 1.55 |
| 6039. | 7.76 | 2.15 | 1.50 | 1.54 | 1.55 | 1.48 | 1.55 |
| 6073. | 7.86 | 2.90 | 1.55 | 1.59 | 1.59 | 1.54 | 1.56 |
| 6106. | 7.97 | 2.52 | 1.60 | 1.58 | 1.62 | 1.57 | 1.58 |
| 6139. | 7.93 | 2.53 | 1.58 | 1.58 | 1.60 | 1.56 | 1.58 |
| 6170. | 7.87 | 2.52 | 1.58 | 1.59 | 1.60 | 1.57 | 1.58 |

PACK NO. 98  
GOULD 20 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115  
TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT  
VOLTAGE 10.00

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |       |      |      |      |      |     |
|-------|------|-------|------|------|------|------|-----|
| 5646. | 4.72 | 9.99  | 1.16 | 1.22 | 1.17 | 1.21 | .00 |
| 5694. | 4.61 | 10.16 | 1.08 | 1.22 | 1.07 | 1.20 | .00 |
| 5727. | 4.39 | 10.17 | 1.00 | 1.19 | 1.09 | 1.15 | .00 |
| 5768. | 4.17 | 10.09 | .90  | 1.16 | 1.01 | 1.11 | .00 |
| 5790. | 4.73 | 10.11 | 1.13 | 1.24 | 1.17 | 1.22 | .00 |
| 5818. | 4.40 | 10.09 | .98  | 1.19 | 1.08 | 1.15 | .00 |
| 5852. | 3.97 | 8.92  | .84  | 1.14 | .93  | 1.07 | .00 |
| 5885. | 4.82 | 10.08 | 1.17 | 1.24 | 1.19 | 1.23 | .00 |
| 5918. | 4.76 | 10.04 | 1.15 | 1.23 | 1.14 | 1.22 | .00 |
| 5949. | 4.69 | 10.08 | 1.14 | 1.22 | 1.16 | 1.20 | .00 |

END OF  
CHARGE

|       |      |      |      |      |      |      |     |
|-------|------|------|------|------|------|------|-----|
| 5646. | 6.21 | 4.24 | 1.59 | 1.53 | 1.56 | 1.57 | .00 |
| 5694. | 5.99 | 4.04 | 1.53 | 1.46 | 1.49 | 1.52 | .00 |
| 5727. | 5.93 | 4.07 | 1.52 | 1.45 | 1.49 | 1.50 | .00 |
| 5768. | 5.93 | 4.33 | 1.54 | 1.45 | 1.48 | 1.49 | .00 |
| 5790. | 6.20 | 3.94 | 1.59 | 1.51 | 1.54 | 1.60 | .00 |
| 5818. | 5.92 | 4.18 | 1.50 | 1.42 | 1.45 | 1.48 | .00 |
| 5852. | 6.01 | 5.50 | 1.57 | 1.46 | 1.50 | 1.49 | .00 |
| 5885. | 6.62 | 3.90 | 1.67 | 1.58 | 1.60 | 1.78 | .00 |
| 5918. | 6.26 | 3.37 | 1.60 | 1.54 | 1.57 | 1.59 | .00 |
| 5949. | 6.20 | 3.41 | 1.60 | 1.53 | 1.56 | 1.58 | .00 |

PACK NO. 112  
GOULD 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK VOLTAGE 6.00 CURRENT

1 2 3 4 5  
CELL VOLTAGES

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |      |     |     |      |      |      |
|-------|------|------|-----|-----|------|------|------|
| 5086. | 3.40 | 5.86 | .00 | .00 | 1.22 | 1.13 | 1.08 |
| 5106. | 3.29 | 6.02 | .00 | .00 | 1.20 | 1.11 | 1.02 |
| 5145. | 3.26 | 5.99 | .00 | .00 | 1.18 | 1.10 | .99  |
| 5176. | 3.85 | 6.01 | .00 | .00 | 1.35 | 1.26 | 1.26 |
| 5211. | 2.24 | 5.83 | .00 | .00 | 1.23 | 1.14 | .09  |
| 5086. | 4.46 | 4.80 | .00 | .00 | 1.43 | 1.59 | 1.45 |
| 5106. | 4.40 | 1.30 | .00 | .00 | 1.42 | 1.55 | 1.45 |
| 5145. | 4.42 | 2.41 | .00 | .00 | 1.45 | 1.55 | 1.48 |
| 5176. | 4.38 | 1.38 | .00 | .00 | 1.42 | 1.50 | 1.46 |
| 5211. | 4.25 | 4.89 | .00 | .00 | 1.49 | 1.42 | 1.38 |

PACK FAWFC, CYCLE 5011

84.

PACK NO. 80  
GOULD 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT  
NO. VOLTAGE 6.00

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|
| 2916. | 6.17 | 6.09 | 1.25 | 1.21 | 1.26 | 1.26 |
| 2946. | 6.15 | 6.09 | 1.25 | 1.19 | 1.27 | 1.25 |
| 2979. | 6.16 | 6.07 | 1.24 | 1.20 | 1.25 | 1.25 |
| 3013. | 6.20 | 6.08 | 1.26 | 1.22 | 1.26 | 1.26 |
| 3042. | 6.15 | 6.03 | 1.26 | 1.20 | 1.25 | 1.24 |
| 3077. | 6.13 | 6.11 | 1.24 | 1.20 | 1.25 | 1.24 |
| 3107. | 6.14 | 5.97 | 1.24 | 1.20 | 1.24 | 1.23 |

END OF  
CHARGE

|       |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|
| 2916. | 7.76 | 1.38 | 1.53 | 1.59 | 1.54 | 1.56 |
| 2946. | 7.75 | 1.06 | 1.53 | 1.58 | 1.54 | 1.56 |
| 2979. | 7.67 | 1.03 | 1.52 | 1.55 | 1.52 | 1.55 |
| 3013. | 7.69 | .97  | 1.53 | 1.57 | 1.53 | 1.56 |
| 3042. | 7.67 | 1.00 | 1.52 | 1.56 | 1.52 | 1.55 |
| 3077. | 7.65 | .99  | 1.52 | 1.55 | 1.52 | 1.54 |
| 3107. | 7.64 | 1.02 | 1.52 | 1.55 | 1.52 | 1.54 |

80.

PACK NO. 94  
GOULD 20 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT  
VOLTAGE 10.00

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |       |      |      |      |      |      |
|-------|------|-------|------|------|------|------|------|
| 2787. | 6.02 | 9.78  | 1.23 | 1.21 | 1.20 | 1.22 | 1.21 |
| 2817. | 5.92 | 10.31 | 1.21 | 1.20 | 1.19 | 1.20 | 1.19 |
| 2850. | 5.93 | 10.29 | 1.21 | 1.19 | 1.17 | 1.19 | 1.18 |
| 2884. | 5.86 | 10.28 | 1.20 | 1.17 | 1.17 | 1.19 | 1.17 |
| 2923. | 5.96 | 10.22 | 1.22 | 1.20 | 1.18 | 1.20 | 1.19 |
| 2953. | 6.06 | 10.18 | 1.24 | 1.22 | 1.22 | 1.23 | 1.23 |

|       |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|
| 2787. | 7.64 | 2.30 | 1.48 | 1.58 | 1.55 | 1.56 |
| 2817. | 7.46 | 1.87 | 1.47 | 1.54 | 1.52 | 1.53 |
| 2850. | 7.48 | 1.90 | 1.45 | 1.53 | 1.51 | 1.52 |
| 2884. | 7.34 | 1.92 | 1.45 | 1.50 | 1.48 | 1.50 |
| 2923. | 7.35 | 2.25 | 1.44 | 1.50 | 1.48 | 1.50 |
| 2953. | 7.63 | 1.89 | 1.46 | 1.59 | 1.57 | 1.58 |

PACK NO. 105  
GOULD 20 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE 10.00

CURRENT

CELL VOLTAGES

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |       |      |      |      |      |      |
|-------|------|-------|------|------|------|------|------|
| 2768. | 5.90 | 10.00 | 1.16 | 1.19 | 1.17 | 1.21 | 1.20 |
| 2797. | 5.91 | 9.92  | 1.16 | 1.20 | 1.15 | 1.23 | 1.21 |
| 2832. | 5.93 | 9.95  | 1.16 | 1.19 | 1.14 | 1.22 | 1.21 |
| 2870. | 5.90 | 10.09 | 1.16 | 1.19 | 1.20 | 1.21 | 1.20 |
| 2903. | 5.94 | 10.08 | 1.16 | 1.20 | 1.20 | 1.21 | 1.21 |
| 2935. | 5.88 | 10.16 | 1.17 | 1.21 | 1.21 | 1.22 | 1.21 |

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2768. | 7.39 | 2.50 | 1.51 | 1.48 | 1.48 | 1.47 | 1.48 |
| 2797. | 7.37 | 2.52 | 1.51 | 1.48 | 1.48 | 1.48 | 1.49 |
| 2832. | 7.36 | 2.49 | 1.50 | 1.47 | 1.47 | 1.47 | 1.48 |
| 2870. | 7.35 | 2.50 | 1.49 | 1.47 | 1.47 | 1.47 | 1.48 |
| 2903. | 7.37 | 2.50 | 1.51 | 1.46 | 1.47 | 1.46 | 1.48 |
| 2935. | 7.36 | 2.51 | 1.49 | 1.46 | 1.47 | 1.47 | 1.48 |



PACK NO. 108  
GOULD 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK CURRENT

VOLTAGE 6.00 1

CELL VOLTAGES

2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2747. | 5.99 | 6.08 | 1.21 | 1.20 | 1.21 | 1.19 | 1.22 |
| 2777. | 5.94 | 6.06 | 1.20 | 1.19 | 1.20 | 1.18 | 1.21 |
| 2810. | 6.01 | 6.06 | 1.20 | 1.20 | 1.21 | 1.18 | 1.21 |
| 2843. | 6.01 | 6.05 | 1.22 | 1.21 | 1.22 | 1.19 | 1.23 |
| 2872. | 5.96 | 6.06 | 1.20 | 1.19 | 1.21 | 1.18 | 1.22 |
| 2907. | 5.94 | 6.05 | 1.19 | 1.19 | 1.20 | 1.17 | 1.21 |
| 2937. | 5.93 | 6.03 | 1.21 | 1.20 | 1.21 | 1.19 | 1.21 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2747. | 7.20 | 1.92 | 1.44 | 1.45 | 1.43 | 1.45 | 1.44 |
| 2777. | 7.18 | 1.54 | 1.45 | 1.45 | 1.43 | 1.45 | 1.44 |
| 2810. | 7.22 | 1.49 | 1.44 | 1.44 | 1.42 | 1.45 | 1.44 |
| 2843. | 7.23 | 1.96 | 1.45 | 1.45 | 1.43 | 1.45 | 1.45 |
| 2872. | 7.19 | 1.40 | 1.44 | 1.45 | 1.43 | 1.45 | 1.44 |
| 2907. | 7.19 | 1.37 | 1.44 | 1.44 | 1.42 | 1.44 | 1.44 |
| 2937. | 7.19 | 1.35 | 1.45 | 1.45 | 1.43 | 1.45 | 1.45 |
|       |      | 1.36 |      |      |      |      |      |

PACK NO. 73  
GULTON 20 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. 1  
PACK VOLTAGE 10.00

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |       |      |      |     |      |      |
|-------|------|-------|------|------|-----|------|------|
| 5675. | 4.76 | 10.04 | 1.18 | 1.23 | .00 | 1.20 | 1.19 |
| 5702. | 4.65 | 10.17 | 1.15 | 1.22 | .00 | 1.16 | 1.18 |
| 5728. | 4.59 | 10.16 | 1.13 | 1.21 | .00 | 1.14 | 1.16 |
| 5762. | 4.51 | 10.19 | 1.09 | 1.20 | .00 | 1.11 | 1.15 |
| 5800. | 4.51 | 10.18 | 1.09 | 1.19 | .00 | 1.11 | 1.15 |
| 5831. | 4.41 | 10.12 | 1.06 | 1.19 | .00 | 1.06 | 1.13 |
| 5858. | 4.35 | 10.03 | 1.04 | 1.18 | .00 | 1.03 | 1.12 |
| 5893. | 4.31 | 10.02 | 1.03 | 1.19 | .00 | 1.04 | 1.13 |

END OF  
CHARGE

|       |      |      |      |      |     |      |      |
|-------|------|------|------|------|-----|------|------|
| 5675. | 5.86 | 6.25 | 1.49 | 1.47 | .00 | 1.44 | 1.48 |
| 5702. | 5.92 | 4.92 | 1.51 | 1.50 | .00 | 1.44 | 1.49 |
| 5728. | 5.92 | 4.62 | 1.52 | 1.49 | .00 | 1.44 | 1.48 |
| 5762. | 5.91 | 4.39 | 1.53 | 1.49 | .00 | 1.44 | 1.47 |
| 5800. | 5.92 | 4.64 | 1.53 | 1.49 | .00 | 1.45 | 1.47 |
| 5831. | 5.89 | 4.41 | 1.52 | 1.47 | .00 | 1.44 | 1.46 |
| 5858. | 5.89 | 4.52 | 1.52 | 1.47 | .00 | 1.44 | 1.47 |
| 5893. | 5.87 | 4.36 | 1.54 | 1.49 | .00 | 1.45 | 1.47 |

PACK NO. 76  
GULTON 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK VOLTAGE 6.00 CURRENT

CELL VOLTAGES

END OF  
DISCHARGE

END OF  
CHARGE

| 1  | 2 | 3 | 4 | 5 |
|--|---|---|---|---|
| 5587. 5.52 6.03 1.16 1.07 1.12 1.13 1.10 |   |   |   |   |
| 5607. 5.51 6.03 1.17 1.08 1.14 1.14 1.13 |   |   |   |   |
| 5647. 5.58 6.03 1.17 1.08 1.14 1.14 1.13 |   |   |   |   |
| 5677. 5.59 6.01 1.17 .96 1.14 1.15 1.12  |   |   |   |   |
| 5722. 5.51 6.02 1.16 1.10 1.13 1.13 1.13 |   |   |   |   |
| 5750. 5.60 6.03 1.16 1.09 1.14 1.14 1.14 |   |   |   |   |
| 5784. 5.57 6.05 1.16 1.07 1.13 1.13 1.13 |   |   |   |   |
| 5817. 5.60 6.05 1.16 1.07 1.14 1.14 1.14 |   |   |   |   |
| 5850. 5.59 6.03 1.17 .96 1.14 1.15 1.13  |   |   |   |   |
| 5881. 5.54 6.07 1.16 1.06 1.13 1.14 1.13 |   |   |   |   |
| 4.80                                     |   |   |   |   |
| 5587. 7.23 4.05 1.45 1.50 1.43 1.48 1.44 |   |   |   |   |
| 5607. 7.24 4.13 1.46 1.50 1.43 1.47 1.44 |   |   |   |   |
| 5647. 7.25 4.35 1.44 1.49 1.42 1.47 1.43 |   |   |   |   |
| 5677. 7.25 4.54 1.45 1.49 1.43 1.47 1.43 |   |   |   |   |
| 5722. 7.25 4.24 1.45 1.50 1.44 1.48 1.44 |   |   |   |   |
| 5750. 7.26 4.45 1.44 1.48 1.42 1.46 1.42 |   |   |   |   |
| 5784. 7.26 4.26 1.45 1.49 1.43 1.48 1.43 |   |   |   |   |
| 5817. 7.25 4.22 1.45 1.49 1.43 1.48 1.43 |   |   |   |   |
| 5850. 7.27 4.42 1.46 1.48 1.43 1.48 1.44 |   |   |   |   |
| 5881. 7.22 4.19 1.47 1.50 1.44 1.49 1.44 |   |   |   |   |

PACK NO. 116  
GULTON 20 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

| CYCLE NO. | PACK VOLTAGE | CURRENT 10.00 | CELL VOLTAGES |      |      |      |      |
|-----------|--------------|---------------|---------------|------|------|------|------|
|           |              |               | 1             | 2    | 3    | 4    | 5    |
| 2578.     | 5.88         | 10.04         | 1.20          | 1.19 | 1.14 | 1.20 | 1.18 |
| 2605.     | 5.81         | 9.97          | 1.19          | 1.18 | 1.13 | 1.19 | 1.17 |
| 2638.     | 5.82         | 9.97          | 1.17          | 1.18 | 1.12 | 1.19 | 1.16 |
| 2671.     | 5.97         | 7.69          | 1.21          | 1.22 | 1.16 | 1.22 | 1.20 |
| 2700.     | 5.77         | 9.76          | 1.19          | 1.18 | 1.13 | 1.19 | 1.16 |
| 2735.     | 5.22         | 9.25          | 1.09          | 1.09 | .92  | 1.10 | 1.03 |
| 2.30      |              |               |               |      |      |      |      |
| 2578.     | 7.74         | 1.78          | 1.52          | 1.58 | 1.56 | 1.56 | 1.53 |
| 2605.     | 7.61         | 1.82          | 1.49          | 1.56 | 1.54 | 1.54 | 1.52 |
| 2638.     | 7.56         | 1.77          | 1.47          | 1.54 | 1.52 | 1.52 | 1.50 |
| 2671.     | 8.08         | 1.40          | 1.54          | 1.71 | 1.61 | 1.69 | 1.57 |
| 2700.     | 7.11         | 1.81          | 1.43          | 1.43 | 1.43 | 1.44 | 1.43 |
| 2735.     | 6.99         | 2.18          | 1.38          | 1.40 | 1.40 | 1.39 | 1.38 |

END OF  
DISCHARGE

END OF  
CHARGE

PACK NO. 77  
GUITON 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE 6.00 CURRENT

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2775. | 5.83 | 6.00 | 1.18 | 1.18 | 1.16 | 1.17 | 1.20 |
| 2804. | 5.46 | 5.96 | 1.12 | 1.10 | 1.05 | 1.10 | 1.15 |
| 2831. | 5.69 | 5.97 | 1.14 | 1.11 | 1.07 | 1.11 | 1.18 |
| 2858. | 5.49 | 5.91 | 1.12 | 1.10 | 1.06 | 1.10 | 1.15 |
| 2889. | 5.47 | 5.92 | 1.10 | 1.09 | 1.05 | 1.10 | 1.15 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2775. | 7.06 | 1.92 | 1.43 | 1.42 | 1.42 | 1.42 | 1.43 |
| 2804. | 7.05 | 1.95 | 1.42 | 1.42 | 1.41 | 1.42 | 1.43 |
| 2831. | 7.05 | 1.90 | 1.42 | 1.41 | 1.41 | 1.41 | 1.42 |
| 2858. | 7.05 | 1.93 | 1.42 | 1.42 | 1.42 | 1.42 | 1.43 |
| 2889. | 7.05 | 1.88 | 1.42 | 1.41 | 1.41 | 1.41 | 1.42 |

PACK NO. 102  
GULTON 20 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 3 HOURS

CYCLE NO. PACK VOLTAGE 6.00 CURRENT

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 2718. | 4.93 | 6.01 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| 2748. | 4.91 | 6.00 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.23 |
| 2781. | 4.90 | 5.99 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| 2815. | 4.85 | 5.98 | 1.25 | 1.25 | 1.25 | 1.25 | 1.24 | 1.24 |
| 2854. | 4.90 | 5.05 | 1.24 | 1.24 | 1.23 | 1.23 | 1.22 | 1.22 |
| 2884. | 4.99 | 5.93 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 |

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 2718. | 6.15 | 1.38 | 1.55 | 1.61 | 1.48 | 1.54 | 1.54 | 1.54 |
| 2748. | 6.14 | 1.01 | 1.56 | 1.61 | 1.48 | 1.52 | 1.52 | 1.52 |
| 2781. | 6.01 | 1.16 | 1.53 | 1.54 | 1.46 | 1.49 | 1.49 | 1.49 |
| 2815. | 6.14 | 1.03 | 1.55 | 1.59 | 1.49 | 1.53 | 1.53 | 1.53 |
| 2854. | 5.80 | 1.92 | 1.51 | 1.49 | 1.41 | 1.41 | 1.41 | 1.41 |
| 2884. | 6.20 | 1.41 | 1.58 | 1.58 | 1.51 | 1.56 | 1.56 | 1.56 |

PACK NO. 91  
GULTON 20 A.M.

TEST TEMPERATURE 40 C  
ORBIT PERIOD 3 HOURS

CYCLE PACK CURRENT  
NO. VOLTAGE 10.00

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

CELL VOLTAGES  
1 2 3 4 5

END OF  
RECHARGE

|       |      |       |      |      |      |      |      |
|-------|------|-------|------|------|------|------|------|
| 2687. | 5.10 | 10.02 | 1.07 | 1.05 | 1.08 | 1.00 | 1.03 |
| 2717. | 5.00 | 10.00 | 1.04 | 1.02 | 1.06 | .90  | 1.00 |
| 2731. | 5.16 | 10.00 | 1.05 | .95  | 1.00 | .98  | 1.04 |
| 2736. | 5.16 | 10.05 | 1.05 | 1.05 | 1.08 | .97  | 1.03 |
| 2742. | 5.02 | 10.00 | 1.02 | 1.01 | 1.05 | .88  | 1.00 |
| 2747. | 5.02 | 10.00 | 1.03 | 1.02 | 1.06 | .93  | 1.00 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2687. | 7.17 | 3.20 | 1.44 | 1.43 | 1.46 | 1.44 | 1.43 |
| 2716. | 7.10 | 3.07 | 1.44 | 1.43 | 1.47 | 1.44 | 1.43 |
| 2751. | 7.23 | 3.11 | 1.43 | 1.42 | 1.46 | 1.43 | 1.43 |
| 2759. | 7.21 | 3.00 | 1.44 | 1.43 | 1.47 | 1.45 | 1.44 |
| 2762. | 7.20 | 2.92 | 1.44 | 1.44 | 1.47 | 1.45 | 1.43 |
| 2767. | 7.21 | 2.86 | 1.42 | 1.43 | 1.47 | 1.44 | 1.43 |

PACK NO. 79  
GULTON 6 A.H.

TEST TEMPERATURE 25 C  
ORBIT PERIOD 24 HOURS

CYCLE PACK CURRENT  
NO. VOLTAGE 3.3

1 2 3 4 5  
CELL VOLTAGES

END OF  
DISCHARGE

END OF  
CHARGE

|      |      |      |     |      |     |      |      |
|------|------|------|-----|------|-----|------|------|
| 300. | 2.96 | 2.64 | .00 | 1.05 | .00 | 1.11 | 1.07 |
| 308. | 3.23 | 2.78 | .00 | 1.09 | .00 | 1.12 | 1.10 |
| 316. | 3.27 | 3.02 | .00 | 1.12 | .00 | 1.11 | 1.11 |
| 300. | 4.31 | .26  | .00 | 1.41 | .00 | 1.40 | 1.40 |
| 308. | 4.26 | .27  | .00 | 1.42 | .00 | 1.41 | 1.41 |
| 316. | 4.19 | .25  | .00 | 1.37 | .00 | 1.37 | 1.37 |



PACK NO. 93  
G.E. 12 A.H.

DEPTH OF DISCHARGE 50  
PERCENT OF RECHARGE 200

TEST TEMPERATURE 40 C  
ORBIT PERIOD 2 1/4 HOURS

CYCLE NO. PACK VOLTAGE CURRENT CELL VOLTAGES  
1 2 3 4 5

279. 4.13 6.00 .00 1.00 1.04 1.03  
237. .73 2.14 .00 .00 .04 .19 .11

END OF  
DISCHARGE

279. 5.57 .52 .00 1.40 1.40 1.40  
237. 5.59 .68 .00 .00 1.40 1.40 1.42

END OF  
CHARGE

LOW VOLTAGES MAY BE DUE TO "MEMORY" EFFECT. PACK WAS GIVEN A CAPACITY TYPE TEST  
AND RETURNED TO STORAGE.



PACK NO. 315  
GULTON 4 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. 1.2  
PACK CURRENT  
VOLTAGE

1 2 3 4 5  
CELL VOLTAGES

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2022. | 6.21 | 1.10 | 1.25 | 1.25 | 1.25 | 1.25 | 1.24 |
| 3052. | 6.10 | 1.10 | 1.25 | 1.25 | 1.25 | 1.24 | 1.24 |
| 3080. | 6.18 | 1.19 | 1.25 | 1.25 | 1.24 | 1.24 | 1.24 |
| 3122. | 6.20 | 1.17 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 3162. | 6.28 | 1.18 | 1.26 | 1.26 | 1.27 | 1.26 | 1.26 |
| 3188. | 6.27 | 1.18 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 |
| 3222. | 6.20 | 1.18 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| 3260. | 6.19 | 1.18 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 |
| 3291. | 6.18 | 1.18 | 1.24 | 1.24 | 1.23 | 1.24 | 1.24 |
| 3318. | 6.19 | 1.18 | 1.24 | 1.24 | 1.23 | 1.24 | 1.24 |
| 3353. | 6.23 | 1.18 | 1.23 | 1.23 | 1.23 | 1.23 | 1.24 |

END OF  
CHARGE

|       |      |     |      |      |      |      |      |
|-------|------|-----|------|------|------|------|------|
| 2022. | 7.72 | .69 | 1.54 | 1.55 | 1.54 | 1.55 | 1.55 |
| 3052. | 7.66 | .59 | 1.53 | 1.54 | 1.52 | 1.54 | 1.53 |
| 3080. | 7.72 | .54 | 1.55 | 1.55 | 1.54 | 1.55 | 1.55 |
| 3122. | 7.68 | .60 | 1.54 | 1.55 | 1.53 | 1.54 | 1.54 |
| 3162. | 7.75 | .61 | 1.54 | 1.57 | 1.55 | 1.56 | 1.56 |
| 3188. | 7.80 | .64 | 1.56 | 1.58 | 1.56 | 1.57 | 1.57 |
| 3222. | 7.44 | .35 | 1.50 | 1.52 | 1.49 | 1.51 | 1.50 |
| 3260. | 7.37 | .47 | 1.47 | 1.49 | 1.47 | 1.48 | 1.47 |
| 3291. | 7.05 | .44 | 1.49 | 1.51 | 1.48 | 1.50 | 1.49 |
| 3318. | 7.54 | .40 | 1.50 | 1.52 | 1.49 | 1.51 | 1.50 |
| 3353. | 7.52 | .38 | 1.50 | 1.51 | 1.49 | 1.51 | 1.50 |

98.

PACK NO. 204  
GULTON 4 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK VOLTAGE CURRENT

CELL VOLTAGES

END OF  
DISCHARGE

| CYCLE NO. | PACK VOLTAGE | CURRENT | 1    | 2    | 3    | 4    | 5    |
|-----------|--------------|---------|------|------|------|------|------|
| 2877.     | 5.83         | 1.99    | 1.17 | 1.16 | 1.17 | 1.18 | 1.19 |
| 2899.     | 5.05         | 2.01    | 1.22 | 1.22 | 1.23 | 1.22 | 1.22 |
| 2935.     | 5.09         | 2.00    | 1.20 | 1.19 | 1.21 | 1.19 | 1.20 |
| 2955.     | 5.09         | 1.99    | 1.20 | 1.19 | 1.21 | 1.20 | 1.21 |
| 2985.     | 6.00         | 1.99    | 1.21 | 1.19 | 1.21 | 1.20 | 1.21 |
| 3029.     | 5.96         | 2.00    | 1.21 | 1.19 | 1.21 | 1.20 | 1.21 |
| 3051.     | 5.96         | 1.99    | 1.20 | 1.19 | 1.21 | 1.20 | 1.21 |
| 3091.     | 5.02         | 2.00    | 1.20 | 1.17 | 1.20 | 1.19 | 1.20 |
| 3109.     | 5.96         | 1.99    | 1.20 | 1.18 | 1.21 | 1.19 | 1.20 |
| 3146.     | 5.00         | 1.99    | 1.19 | 1.17 | 1.19 | 1.19 | 1.19 |
| 3176.     | 5.88         | 1.99    | 1.19 | 1.16 | 1.19 | 1.18 | 1.20 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2877. | 7.29 | 1.25 | 1.47 | 1.47 | 1.47 | 1.47 | 1.48 |
| 2899. | 7.29 | 1.25 | 1.46 | 1.47 | 1.45 | 1.48 | 1.49 |
| 2935. | 7.27 | 1.27 | 1.45 | 1.45 | 1.44 | 1.46 | 1.47 |
| 2955. | 7.31 | 1.25 | 1.46 | 1.46 | 1.45 | 1.47 | 1.48 |
| 2985. | 7.32 | 1.25 | 1.47 | 1.47 | 1.45 | 1.48 | 1.49 |
| 3029. | 7.32 | 1.25 | 1.47 | 1.47 | 1.46 | 1.48 | 1.49 |
| 3051. | 7.32 | 1.25 | 1.47 | 1.47 | 1.46 | 1.48 | 1.49 |
| 3083. | 7.27 | 1.25 | 1.46 | 1.46 | 1.45 | 1.47 | 1.47 |
| 3109. | 7.30 | 1.26 | 1.45 | 1.46 | 1.45 | 1.47 | 1.48 |
| 3146. | 7.22 | 1.26 | 1.45 | 1.44 | 1.44 | 1.46 | 1.46 |
| 3176. | 7.25 | 1.14 | 1.45 | 1.45 | 1.44 | 1.46 | 1.47 |

100.

PACK NO. 326  
GULTON 4 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT  
VOLTAGE 2.0

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 3026. | 6.01 | 1.99 | 1.20 | 1.21 | 1.20 | 1.19 | 1.20 |
| 3064. | 5.93 | 2.00 | 1.21 | 1.21 | 1.20 | 1.20 | 1.20 |
| 3084. | 5.99 | 1.99 | 1.21 | 1.21 | 1.20 | 1.20 | 1.20 |
| 3123. | 6.00 | 1.99 | 1.20 | 1.21 | 1.20 | 1.20 | 1.20 |
| 3160. | 6.03 | 1.99 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 |
| 3200. | 6.10 | 1.98 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 |
| 3238. | 6.06 | 1.99 | 1.22 | 1.22 | 1.22 | 1.21 | 1.22 |
| 3262. | 6.04 | 1.99 | 1.21 | 1.21 | 1.21 | 1.20 | 1.21 |
| 3295. | 6.16 | 1.99 | 1.23 | 1.24 | 1.22 | 1.22 | 1.23 |
| 3328. | 6.05 | 1.98 | 1.22 | 1.09 | 1.23 | 1.22 | 1.21 |
| 3359. | 6.02 | 2.00 | 1.22 | 1.22 | 1.21 | 1.20 | 1.20 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 3026. | 7.76 | 1.15 | 1.55 | 1.53 | 1.55 | 1.56 | 1.54 |
| 3064. | 7.81 | .97  | 1.57 | 1.55 | 1.56 | 1.57 | 1.55 |
| 3084. | 7.84 | .86  | 1.58 | 1.55 | 1.57 | 1.58 | 1.56 |
| 3123. | 7.80 | .87  | 1.57 | 1.55 | 1.56 | 1.56 | 1.55 |
| 3160. | 7.86 | .89  | 1.58 | 1.55 | 1.58 | 1.59 | 1.57 |
| 3200. | 7.89 | .89  | 1.58 | 1.56 | 1.58 | 1.59 | 1.57 |
| 3238. | 7.81 | .94  | 1.57 | 1.54 | 1.57 | 1.57 | 1.56 |
| 3262. | 7.90 | .88  | 1.58 | 1.55 | 1.57 | 1.58 | 1.57 |
| 3295. | 7.88 | .87  | 1.58 | 1.54 | 1.57 | 1.58 | 1.56 |
| 3328. | 7.88 | .88  | 1.57 | 1.55 | 1.57 | 1.58 | 1.57 |
| 3359. | 7.84 | .87  | 1.58 | 1.56 | 1.58 | 1.59 | 1.57 |

PACK NO. 214  
GULTON 4 A.H.

DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK VOLTAGE CURRENT

CELL VOLTAGES

END OF  
DISCHARGE

END OF  
CHARGE

| CYCLE NO. | PACK VOLTAGE | CURRENT | 1    | 2    | 3    | 4    | 5    |
|-----------|--------------|---------|------|------|------|------|------|
| 2565.     | 5.63         | 3.19    | 1.13 | 1.14 | 1.14 | 1.12 | 1.14 |
| 2603.     | 5.41         | 3.20    | 1.10 | 1.09 | 1.11 | 1.08 | 1.10 |
| 2613.     | 5.70         | 3.19    | 1.13 | 1.15 | 1.15 | 1.14 | 1.16 |
| 2643.     | 5.59         | 3.20    | 1.14 | 1.01 | 1.16 | 1.14 | 1.14 |
| 2676.     | 5.67         | 3.20    | 1.14 | 1.14 | 1.15 | 1.13 | 1.15 |
| 2717.     | 5.53         | 3.21    | 1.13 | 1.13 | 1.13 | 1.12 | 1.14 |
| 2739.     | 5.66         | 3.20    | 1.14 | 1.14 | 1.14 | 1.13 | 1.15 |
| 2767.     | 5.57         | 3.20    | 1.12 | 1.13 | 1.13 | 1.11 | 1.14 |
| 2801.     | 5.54         | 3.21    | 1.11 | 1.11 | 1.12 | 1.10 | 1.12 |
| 2824.     | 5.51         | 3.21    | 1.12 | 1.13 | 1.13 | 1.12 | 1.14 |
| 2867.     | 5.51         | 3.20    | 1.14 | 1.00 | 1.15 | 1.13 | 1.12 |
| 2898.     | 5.53         | 3.21    | 1.11 | 1.10 | 1.11 | 1.09 | 1.11 |

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2565. | 7.43 | 2.00 | 1.49 | 1.47 | 1.53 | 1.49 | 1.50 |
| 2603. | 7.30 | 1.95 | 1.48 | 1.46 | 1.51 | 1.48 | 1.49 |
| 2613. | 7.35 | 2.00 | 1.48 | 1.46 | 1.51 | 1.48 | 1.49 |
| 2643. | 7.42 | 2.02 | 1.48 | 1.46 | 1.52 | 1.48 | 1.49 |
| 2676. | 7.45 | 2.02 | 1.50 | 1.47 | 1.54 | 1.50 | 1.50 |
| 2717. | 7.41 | 2.04 | 1.48 | 1.47 | 1.53 | 1.48 | 1.49 |
| 2739. | 7.45 | 2.03 | 1.49 | 1.47 | 1.54 | 1.49 | 1.50 |
| 2767. | 7.40 | 2.02 | 1.44 | 1.42 | 1.48 | 1.44 | 1.44 |
| 2801. | 7.43 | 1.99 | 1.49 | 1.47 | 1.53 | 1.49 | 1.49 |
| 2834. | 7.43 | 1.89 | 1.49 | 1.47 | 1.53 | 1.49 | 1.49 |
| 2867. | 7.42 | 1.91 | 1.48 | 1.47 | 1.53 | 1.49 | 1.49 |
| 2898. | 7.43 | 1.92 | 1.48 | 1.47 | 1.53 | 1.50 | 1.50 |

PACK NO. 228  
GULTON 4 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK VOLTAGE CURRENT

CELL VOLTAGES

1 2 3 4 5

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2878. | 5.94 | 1.19 | 1.21 | 1.21 | 1.20 | 1.16 | 1.20 |
| 2916. | 6.34 | 1.17 | 1.27 | 1.27 | 1.26 | 1.26 | 1.27 |
| 2944. | 6.25 | 1.16 | 1.25 | 1.25 | 1.24 | 1.24 | 1.26 |
| 2974. | 6.20 | 1.16 | 1.25 | 1.25 | 1.24 | 1.24 | 1.26 |
| 3018. | 6.13 | 1.16 | 1.24 | 1.24 | 1.22 | 1.22 | 1.24 |
| 3040. | 6.11 | 1.16 | 1.24 | 1.24 | 1.22 | 1.22 | 1.24 |
| 3072. | 6.07 | 1.17 | 1.24 | 1.23 | 1.20 | 1.20 | 1.23 |
| 3098. | 6.07 | 1.20 | 1.22 | 1.22 | 1.20 | 1.20 | 1.22 |
| 3135. | 6.03 | 1.21 | 1.22 | 1.22 | 1.19 | 1.19 | 1.22 |
| 3165. | 6.03 | 1.18 | 1.22 | 1.21 | 1.19 | 1.19 | 1.22 |

END OF  
DISCHARGE

|       |      |     |      |      |      |      |      |
|-------|------|-----|------|------|------|------|------|
| 2878. | 7.09 | .96 | 1.43 | 1.43 | 1.43 | 1.43 | 1.43 |
| 2919. | 7.02 | .94 | 1.41 | 1.41 | 1.41 | 1.41 | 1.41 |
| 2944. | 7.04 | .95 | 1.41 | 1.41 | 1.41 | 1.41 | 1.41 |
| 2974. | 7.07 | .98 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| 3018. | 7.08 | .98 | 1.43 | 1.43 | 1.43 | 1.43 | 1.43 |
| 3040. | 7.10 | .97 | 1.43 | 1.43 | 1.42 | 1.42 | 1.43 |
| 3072. | 7.08 | .97 | 1.41 | 1.41 | 1.41 | 1.41 | 1.42 |
| 3098. | 7.07 | .96 | 1.42 | 1.42 | 1.42 | 1.42 | 1.42 |
| 3135. | 7.08 | .97 | 1.43 | 1.42 | 1.42 | 1.42 | 1.42 |
| 3165. | 7.08 | .97 | 1.43 | 1.42 | 1.42 | 1.42 | 1.42 |

END OF  
CHARGE

PACK NO. 240  
GULTON 4 A. H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 2.0

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2880. | 5.56 | 2.00 | 1.13 | 1.13 | 1.10 | 1.14 | 1.11 |
| 2938. | 5.55 | 2.02 | 1.12 | 1.12 | 1.09 | 1.13 | 1.10 |
| 2958. | 5.50 | 2.01 | 1.11 | 1.12 | 1.07 | 1.12 | 1.10 |
| 2988. | 5.52 | 2.02 | 1.12 | 1.13 | 1.07 | 1.13 | 1.10 |
| 3032. | 5.47 | 2.02 | 1.11 | 1.13 | 1.06 | 1.12 | 1.09 |
| 3054. | 5.48 | 2.02 | 1.11 | 1.13 | 1.06 | 1.13 | 1.10 |
| 3085. | 5.46 | 2.01 | 1.12 | 1.14 | 1.07 | 1.14 | 1.11 |
| 3112. | 5.52 | 2.01 | 1.11 | 1.13 | 1.08 | 1.12 | 1.11 |
| 3149. | 5.37 | 2.01 | 1.07 | 1.11 | 1.03 | 1.10 | 1.08 |
| 3179. | 5.46 | 2.00 | 1.10 | 1.12 | 1.06 | 1.12 | 1.09 |

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 2880. | 7.20 | 1.60 | 1.45 | 1.45 | 1.45 | 1.44 | 1.45 |
| 2938. | 7.19 | 1.29 | 1.44 | 1.44 | 1.44 | 1.43 | 1.44 |
| 2958. | 7.20 | 1.62 | 1.45 | 1.45 | 1.44 | 1.44 | 1.45 |
| 2988. | 7.21 | 1.59 | 1.46 | 1.45 | 1.44 | 1.44 | 1.46 |
| 3032. | 7.22 | 1.56 | 1.46 | 1.46 | 1.45 | 1.45 | 1.46 |
| 3054. | 7.23 | 1.54 | 1.46 | 1.46 | 1.45 | 1.45 | 1.46 |
| 3085. | 7.19 | 1.53 | 1.44 | 1.43 | 1.42 | 1.42 | 1.43 |
| 3112. | 7.18 | 1.43 | 1.45 | 1.43 | 1.43 | 1.43 | 1.44 |
| 3149. | 7.18 | 1.31 | 1.45 | 1.45 | 1.43 | 1.44 | 1.44 |
| 3179. | 7.18 | 1.28 | 1.45 | 1.45 | 1.44 | 1.44 | 1.44 |



PACK NO. 216  
GULTON 12 A.H.

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | CELL VOLTAGES |      |      |      |      | END OF DISCHARGE |
|-----------|--------------|---------|---------------|------|------|------|------|------------------|
|           |              |         | 1             | 2    | 3    | 4    | 5    |                  |
| 27.       | 6.28         | 3.51    | 1.26          | 1.27 | 1.26 | 1.26 | 1.26 |                  |
| 57.       | 6.25         | 3.64    | 1.26          | 1.26 | 1.26 | 1.26 | 1.26 |                  |
|           |              | 2.07    |               |      |      |      |      |                  |
| 27.       | 7.95         | 2.07    | 1.66          | 1.57 | 1.56 | 1.56 | 1.63 |                  |
| 57.       | 7.74         | 1.36    | 1.61          | 1.54 | 1.53 | 1.54 | 1.55 |                  |
|           |              |         |               |      |      |      |      | END OF CHARGE    |

PACK NO. 301  
GULTON 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. PACK CURRENT  
VOLTAGE 6.00

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 791.  | 6.08 | 5.90 | 1.22 | 1.23 | 1.22 | 1.23 | 1.22 | 1.22 |
| 741.  | 6.06 | 5.93 | 1.22 | 1.23 | 1.22 | 1.23 | 1.22 | 1.22 |
| 759.  | 6.00 | 5.92 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 | 1.22 |
| 891.  | 6.07 | 5.96 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 |
| 829.  | 6.02 | 5.95 | 1.22 | 1.13 | 1.23 | 1.22 | 1.23 | 1.23 |
| 864.  | 6.10 | 5.98 | 1.23 | 1.23 | 1.22 | 1.23 | 1.22 | 1.22 |
| 891.  | 6.09 | 5.97 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 | 1.22 |
| 917.  | 6.10 | 5.92 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 | 1.22 |
| 951.  | 6.06 | 5.92 | 1.22 | 1.23 | 1.22 | 1.22 | 1.22 | 1.21 |
| 939.  | 5.95 | 5.88 | 1.19 | 1.20 | 1.18 | 1.20 | 1.20 | 1.18 |
| 1020. | 5.25 | 5.80 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| 1047. | 5.24 | 5.88 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.24 |
| 1082. | 6.20 | 5.97 | 1.25 | 1.25 | 1.24 | 1.24 | 1.24 | 1.23 |

|       |      |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|------|
| 701.  | 7.75 | 3.45 | 1.55 | 1.56 | 1.54 | 1.60 | 1.55 | 1.55 |
| 741.  | 7.57 | 2.05 | 1.52 | 1.53 | 1.52 | 1.54 | 1.52 | 1.52 |
| 759.  | 7.74 | 2.36 | 1.55 | 1.56 | 1.54 | 1.60 | 1.55 | 1.55 |
| 891.  | 7.57 | 2.47 | 1.52 | 1.53 | 1.52 | 1.53 | 1.52 | 1.52 |
| 829.  | 7.73 | 2.10 | 1.54 | 1.55 | 1.53 | 1.58 | 1.54 | 1.54 |
| 864.  | 7.75 | 2.12 | 1.55 | 1.56 | 1.54 | 1.59 | 1.55 | 1.55 |
| 891.  | 7.76 | 2.07 | 1.55 | 1.56 | 1.54 | 1.59 | 1.55 | 1.55 |
| 917.  | 7.76 | 2.02 | 1.55 | 1.56 | 1.54 | 1.59 | 1.55 | 1.55 |
| 951.  | 7.74 | 2.00 | 1.54 | 1.55 | 1.53 | 1.58 | 1.54 | 1.54 |
| 989.  | 7.09 | 3.20 | 1.42 | 1.42 | 1.41 | 1.42 | 1.42 | 1.42 |
| 1020. | 7.23 | 2.91 | 1.45 | 1.45 | 1.44 | 1.44 | 1.45 | 1.45 |
| 1047. | 7.37 | 2.36 | 1.48 | 1.48 | 1.47 | 1.47 | 1.48 | 1.48 |
| 1082. | 7.41 | 2.06 | 1.49 | 1.48 | 1.47 | 1.47 | 1.47 | 1.47 |

PACK NO. 227  
GULTON 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 6.0

CELL VOLTAGE  
1 2 3 4 5

END OF  
DISCHARGE

|      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|
| 71.  | 6.13 | 6.03 | 1.24 | 1.24 | 1.23 | 1.24 | 1.23 | 1.23 |
| 114. | 6.09 | 6.05 | 1.24 | 1.24 | 1.24 | 1.24 | 1.24 | 1.23 |
| 199. | 6.08 | 5.98 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 | 1.22 |
| 231. | 6.09 | 5.96 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| 273. | 6.08 | 5.95 | 1.23 | 1.23 | 1.22 | 1.23 | 1.23 | 1.23 |
| 295. | 6.07 | 5.97 | 1.22 | 1.23 | 1.22 | 1.23 | 1.22 | 1.22 |
| 327. | 6.03 | 5.96 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 | 1.23 |
| 355. | 6.04 | 5.94 | 1.22 | 1.21 | 1.21 | 1.22 | 1.22 | 1.22 |
| 390. | 6.04 | 5.95 | 1.22 | 1.22 | 1.21 | 1.22 | 1.22 | 1.22 |
| 420. | 6.03 | 5.99 | 1.22 | 1.21 | 1.21 | 1.21 | 1.21 | 1.21 |
| 452. | 6.04 | 5.99 | 1.20 | 1.21 | 1.21 | 1.22 | 1.22 | 1.23 |

END OF  
CHARGE

|      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|
| 71.  | 7.25 | 3.75 | 1.46 | 1.46 | 1.45 | 1.46 | 1.47 | 1.47 |
| 114. | 7.23 | 3.77 | 1.45 | 1.45 | 1.45 | 1.45 | 1.47 | 1.47 |
| 199. | 7.22 | 3.77 | 1.44 | 1.44 | 1.44 | 1.44 | 1.46 | 1.46 |
| 231. | 7.24 | 3.76 | 1.45 | 1.45 | 1.45 | 1.45 | 1.47 | 1.47 |
| 273. | 7.21 | 3.76 | 1.45 | 1.45 | 1.44 | 1.45 | 1.46 | 1.46 |
| 295. | 7.24 | 3.80 | 1.45 | 1.45 | 1.45 | 1.45 | 1.47 | 1.47 |
| 327. | 7.18 | 3.72 | 1.47 | 1.47 | 1.46 | 1.46 | 1.47 | 1.47 |
| 355. | 7.22 | 3.77 | 1.45 | 1.44 | 1.44 | 1.44 | 1.46 | 1.46 |
| 390. | 7.22 | 3.72 | 1.45 | 1.45 | 1.44 | 1.45 | 1.46 | 1.46 |
| 420. | 7.21 | 3.82 | 1.45 | 1.44 | 1.44 | 1.44 | 1.46 | 1.46 |
| 452. | 7.22 | 3.80 | 1.43 | 1.44 | 1.44 | 1.45 | 1.47 | 1.47 |

PACK NO. 296  
GULTON 12 A.H.DEPTH OF DISCHARGE 40  
PERCENT OF RECHARGE 125TEST TEMPERATURE 25 C  
ORBIT PERIOD 90 MIN.CYCLE NO. PACK CURRENT  
VOLTAGE 9.60CELL VOLTAGES  
1 2 3 4 5END OF  
DISCHARGEEND OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 924.  | 5.45 | 9.37 | 1.12 | 1.09 | 1.10 | 1.09 | 1.11 |
| 964.  | 4.60 | 8.14 | 1.02 | .92  | .86  | .90  | .96  |
| 982.  | 4.99 | 8.86 | 1.05 | 1.01 | .94  | 1.03 | 1.02 |
| 1024. | 5.26 | 9.26 | 1.08 | 1.04 | 1.04 | 1.06 | 1.08 |
| 1067. | 4.79 | 9.53 | 1.02 | .96  | .92  | .93  | 1.01 |
| 1114. | 4.87 | 8.68 | 1.02 | .96  | .93  | .96  | 1.04 |
| 1124. | 5.00 | 8.03 | 1.07 | .88  | .92  | 1.00 | 1.08 |
| 1140. | 5.11 | 9.07 | 1.03 | 1.03 | 1.00 | 1.06 | 1.05 |
| 1174. | 4.94 | 8.81 | 1.01 | 1.01 | .95  | .98  | 1.02 |
| 1212. | 5.14 | 9.16 | 1.04 | 1.04 | .99  | 1.04 | 1.06 |
| 1243. | 4.97 | 8.89 | 1.03 | 1.02 | .90  | 1.01 | 1.05 |
| 1270. | 4.62 | 8.28 | .96  | .92  | .81  | .90  | 1.00 |
| 1305. | 5.35 | 9.37 | 1.06 | 1.05 | 1.00 | 1.04 | 1.08 |
| 924.  | 7.32 | 6.09 | 1.48 | 1.47 | 1.46 | 1.47 | 1.48 |
| 964.  | 7.28 | 5.19 | 1.47 | 1.47 | 1.46 | 1.46 | 1.48 |
| 982.  | 7.32 | 5.15 | 1.47 | 1.47 | 1.46 | 1.46 | 1.48 |
| 1024. | 7.21 | 5.43 | 1.45 | 1.45 | 1.45 | 1.45 | 1.46 |
| 1067. | 7.34 | 5.20 | 1.48 | 1.48 | 1.47 | 1.47 | 1.49 |
| 1114. | 7.33 | 6.10 | 1.48 | 1.47 | 1.46 | 1.46 | 1.49 |
| 1124. | 7.30 | 5.18 | 1.46 | 1.46 | 1.45 | 1.45 | 1.48 |
| 1140. | 7.25 | 6.07 | 1.46 | 1.45 | 1.45 | 1.45 | 1.47 |
| 1174. | 7.32 | 5.98 | 1.48 | 1.47 | 1.47 | 1.47 | 1.49 |
| 1212. | 7.23 | 6.10 | 1.45 | 1.45 | 1.45 | 1.45 | 1.46 |
| 1243. | 7.28 | 6.03 | 1.47 | 1.46 | 1.45 | 1.45 | 1.47 |
| 1270. | 7.28 | 6.10 | 1.46 | 1.45 | 1.44 | 1.45 | 1.47 |
| 1305. | 7.33 | 5.97 | 1.47 | 1.46 | 1.45 | 1.45 | 1.48 |

PACK NO. 78  
GULTON 12 A.H.

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE NO. 1  
PACK VOLTAGE 3.60  
CURRENT

DEPTH OF DISCHARGE 15  
PERCENT OF RECHARGE 160

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

|      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|
| 661. | 5.94 | 3.55 | 1.21 | 1.20 | 1.20 | 1.06 | 1.21 |
| 704. | 5.75 | 3.54 | 1.21 | 1.20 | 1.20 | 1.02 | 1.21 |
| 757. | 6.00 | 3.55 | 1.24 | 1.24 | 1.24 | 1.10 | 1.24 |
| 789. | 5.82 | 3.54 | 1.19 | 1.19 | 1.19 | 1.07 | 1.20 |
| 821. | 5.64 | 3.53 | 1.18 | 1.16 | 1.17 | 1.00 | 1.19 |
| 893. | 5.71 | 3.60 | 1.19 | 1.19 | 1.19 | 1.00 | 1.20 |
| 917. | 5.65 | 3.59 | 1.18 | 1.17 | 1.18 | .96  | 1.18 |
| 952. | 5.56 | 3.58 | 1.16 | 1.17 | 1.17 | .92  | 1.18 |
| 984. | 5.53 | 3.57 | 1.17 | 1.16 | 1.16 | .89  | 1.17 |

END OF  
CHARGE

|      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|
| 661. | 7.05 | 2.88 | 1.41 | 1.41 | 1.40 | 1.43 | 1.42 |
| 704. | 7.04 | 2.91 | 1.42 | 1.42 | 1.41 | 1.45 | 1.42 |
| 757. | 7.05 | 2.90 | 1.38 | 1.38 | 1.38 | 1.43 | 1.39 |
| 789. | 7.05 | 2.90 | 1.41 | 1.40 | 1.40 | 1.45 | 1.41 |
| 821. | 6.97 | 1.75 | 1.40 | 1.40 | 1.40 | 1.44 | 1.40 |
| 893. | 7.04 | 2.92 | 1.41 | 1.41 | 1.41 | 1.47 | 1.42 |
| 917. | 7.06 | 2.89 | 1.41 | 1.40 | 1.40 | 1.45 | 1.41 |
| 952. | 7.07 | 2.89 | 1.41 | 1.40 | 1.40 | 1.47 | 1.41 |
| 984. | 7.08 | 2.93 | 1.41 | 1.40 | 1.40 | 1.47 | 1.41 |

PACK NO. 290  
GULTON 12 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40. C  
ORBIT PERIOD 90 MIN.

CYCLE NO.  
PACK VOLTAGE 6.00  
CURRENT

CELL VOLTAGES  
1 2 3 4 5

END OF  
DISCHARGE

END OF  
CHARGE

|       |      |      |      |      |      |      |      |
|-------|------|------|------|------|------|------|------|
| 920.  | 5.17 | 6.02 | 1.04 | 1.05 | 1.04 | 1.04 | 1.03 |
| 966.  | 5.04 | 5.91 | 1.02 | 1.03 | 1.01 | 1.03 | 1.01 |
| 986.  | 5.30 | 6.01 | 1.07 | 1.08 | 1.07 | 1.08 | 1.06 |
| 1026. | 5.31 | 5.91 | 1.08 | 1.08 | 1.07 | 1.08 | 1.06 |
| 1056. | 5.33 | 5.96 | 1.07 | 1.07 | 1.02 | 1.09 | 1.07 |
| 1088. | 5.50 | 6.00 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 |
| 1151. | 5.19 | 5.97 | 1.03 | 1.05 | 1.04 | 1.09 | 1.03 |
| 1179. | 5.14 | 6.00 | 1.03 | 1.04 | 1.03 | 1.06 | 1.02 |
| 1213. | 5.14 | 5.99 | 1.04 | 1.02 | 1.02 | 1.06 | 1.02 |
| 1246. | 5.33 | 5.98 | 1.08 | 1.07 | 1.07 | 1.09 | 1.05 |
| 1279. | 5.31 | 5.97 | 1.07 | 1.07 | 1.01 | 1.10 | 1.06 |
| 1310. | 5.20 | 6.00 | 1.05 | 1.06 | 1.05 | 1.08 | 1.03 |
| 920.  | 7.18 | 4.80 | 1.44 | 1.43 | 1.43 | 1.43 | 1.43 |
| 966.  | 7.16 | 4.88 | 1.44 | 1.43 | 1.43 | 1.43 | 1.43 |
| 986.  | 7.18 | 4.81 | 1.45 | 1.43 | 1.43 | 1.43 | 1.43 |
| 1026. | 7.19 | 4.84 | 1.44 | 1.43 | 1.43 | 1.44 | 1.44 |
| 1056. | 7.18 | 4.82 | 1.44 | 1.43 | 1.43 | 1.43 | 1.43 |
| 1088. | 7.17 | 4.90 | 1.44 | 1.44 | 1.44 | 1.44 | 1.44 |
| 1151. | 7.22 | 4.70 | 1.45 | 1.44 | 1.44 | 1.44 | 1.44 |
| 1179. | 7.21 | 4.58 | 1.44 | 1.43 | 1.43 | 1.43 | 1.44 |
| 1213. | 7.21 | 4.40 | 1.44 | 1.43 | 1.43 | 1.43 | 1.44 |
| 1246. | 7.21 | 4.34 | 1.44 | 1.44 | 1.44 | 1.43 | 1.44 |
| 1279. | 7.21 | 4.43 | 1.45 | 1.44 | 1.44 | 1.43 | 1.44 |
| 1310. | 7.17 | 4.34 | 1.45 | 1.43 | 1.43 | 1.42 | 1.42 |

PACK NO. 238  
GULTON (HS1) 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 3.0

CELL VOLTAGES

1

2

3

4

5

24. 5.94 3.01  
55. 5.98 3.00

1.23 1.03 1.23 1.23 1.21  
1.22 1.21 1.20 1.20 1.20

END OF  
DISCHARGE

2.40  
24. 7.00 2.44  
55. 7.02 2.45

1.42 1.41 1.41 1.40 1.41  
1.42 1.41 1.41 1.42 1.42

END OF  
CHARGE

PACK NO. 213  
GULTON (HSI) 6 A.H.

DEPTH OF DISCHARGE 25  
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C  
ORBIT PERIOD 90 MIN.

CYCLE PACK CURRENT  
NO. VOLTAGE 3.0

1 2 3 4 5  
CELL VOLTAGES

14. 6.19 3.05 1.24 1.24 1.24 1.24  
49. 6.16 2.98 1.22 1.22 1.21 1.22

END OF  
DISCHARGE

14. 7.91 1.46 1.60 1.58 1.57 1.59 1.60  
49. 7.68 1.05 1.54 1.53 1.53 1.56 1.57

END OF  
CHARGE



PACK NO. 218  
 GULTON (HSI) 6 A.H.  
 TEST TEMPERATURE 25 C  
 ORBIT PERIOD 90 MIN.

| CYCLE NO. | PACK VOLTAGE | CURRENT | DEPTH OF DISCHARGE 40<br>PERCENT OF RECHARGE 125 |      |      |      |      | END OF DISCHARGE |
|-----------|--------------|---------|--|------|------|------|------|------------------|
|           |              |         | 1  | 2    | 3    | 4    | 5    |                  |
| 24.       | 6.00         | 4.84    | 1.22   | 1.15 | 1.22 | 1.21 | 1.22 | END OF DISCHARGE |
| 55.       | 5.96         | 4.82    | 1.19   | 1.19 | 1.19 | 1.19 | 1.20 |                  |
| 24.       | 7.20         | 3.00    | 1.44   | 1.44 | 1.43 | 1.45 | 1.45 | END OF CHARGE    |
| 55.       | 7.21         | 3.01    | 1.44   | 1.44 | 1.43 | 1.46 | 1.46 |                  |

///.